Australian Consumers' Association

June 1999

CHOICE

www.choice.com.au

Fast food: what's your best pick?

Thickshakes: bacteria levels too high

Buying shares: how to invest wisely

Antioxidants: health in a pill?

MORE TESTS:

- Dishwashers
- Breadmakers
- Padlocks

The not-so-hard word

Jane Mackenzie

We've been running *The Hard Word* on the back page of CHOICE for nine months now, and thanks to the dozens of subscribers who've sent in ideas for the column, it hasn't been a painful birth. We look forward every week to getting a laugh from all the outrageous pieces of marketing, extravagant labelling and simply unfortunate accidents (like the cheese with the best-before date of 99BC) that you send in.

This is just one more way you shape what you read in CHOICE. You also:

- Take part in user trials to evaluate products — from pantyhose and lipstick to window cleaners and strollers — for the benefit of other subscribers.
- Fill in survey forms telling us your experiences on topics ranging from the reliability of your cars and appliances to your satisfaction with your bank, insurance company and supermarket. We analyse this information to give advice to all subscribers.
- You tell us what products you want us to test and what issues you want to read about.
- You let us know when there are new problems in the marketplace and new scams to watch out for, so we can warn others.
- You tell us about problems you've had with products or services — or sometimes about service beyond your expectations — that we can follow up to keep subscribers informed on topical issues, such as in *Choice Cuts*.
- You write letters and emails with tips and warnings for other subscribers that we print in *Your Letters*.

All in all, you help us every day in our job of keeping all consumers informed, alert and warned about what to expect in the jungle out there. Thanks again.

Jane Mackenzie, Editor

Your letters

We welcome the letters you send us — please always include a daytime telephone number so we can contact you quickly if we want to follow up your letter. We're sorry we can't personally answer every letter we receive, but we do use them in our research. Thanks for taking the time to keep in touch.
Write to us at CHOICE, 57 Carrington Road, Marrickville 2204.
Phone us on (02) 9577 3399.
Fax us on (02) 9577 3355.
email us at ausconsumer@choice.com.au
World Wide Web address: www.choice.com.au

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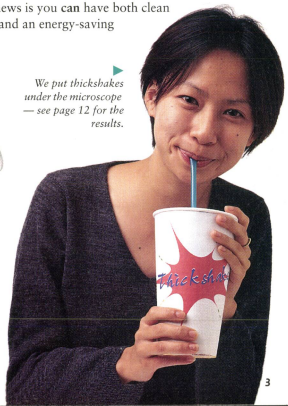


▶ *We put thickshakes under the microscope — see page 12 for the results.*

CHOICE*cuts*

Action on royal jelly

IN RECENT YEARS, THREE PEOPLE have died in Australia and many more have experienced severe allergic reactions after taking royal jelly — the milky secretion of bees taken as a 'health tonic' or rejuvenator, or as a 'miracle cure' for a number of conditions.

While the effect royal jelly has on bees is desirable in a bee colony — it turns a bee larva into a queen rather than a working bee — it has no established therapeutic benefit for humans. However, research has shown that the proteins in royal jelly can cause severe adverse reactions — including death — in some people who suffer from asthma and allergies.

Since the third death caused by royal jelly early in 1996, several agencies — including the NSW Coroner — have recommended that health authorities ban royal jelly from sale. But more than three years later, it's still freely available. All that's required is a warning statement that the product is not to be taken by asthma and allergy sufferers, that it's not suitable for children, and that it may cause severe allergic reactions and, in rare cases, fatalities.

In their wisdom, health and food regulators still aren't going to ban the product — the only way to prevent further deaths and suffering. The proposal likely to be adopted — hopefully in the not too distant future — only goes part of the way. It'll mean that all royal jelly products to be taken by mouth will be removed from the food standards code and declared therapeutic goods, meaning they must meet the requirements for 'listing' by the Therapeutic Goods Administration (TGA).

While this proposal addresses one important aspect — that royal jelly products for oral use shouldn't be sold without regulation — CHOICE thinks it doesn't go far enough. Goods 'listed' with the TGA are considered low-risk. We think royal jelly products should be 'registered' with the TGA, which requires, apart from quality evaluations, acceptable evidence of the product's safety and efficacy to be presented before it's approved for sale.

We also think the sale of royal jelly products should be limited to pharmacies, and that it should be mandatory to provide an information leaflet so that consumers have vital information at the point of sale about the product's potential effects.

Finally, we think the industry should be given an alternative option: to remove the protein allergens from royal jelly (which is technologically fairly straightforward, but costs money) as a condition of listing it with the TGA.

Royal jelly has no established therapeutic benefit for humans and can be dangerous — even deadly — for some people. Don't waste your money.

Tips & Traps

Over 100,000 Australians lost their money in fraudulent and illegal investments in the last 10 years. Here we review the latest investment news from the Australian Securities and Investments Commission (ASIC) and give you tips on how to avoid investment pitfalls. For further information call the ASIC infoline on 1300 300 630 or check its website on www.asic.gov.au.

Insurance scam can leave you uninsured

Around 100 people have found their motor vehicle or house and contents policies are invalid because their premiums were never given to the insurance companies they thought they were insured with.

A Melbourne man posing as an insurance broker collected around $80,000 in premiums, which he didn't pass on to the insurance companies. As a result, his clients were uninsured and risked significant losses.

Insurance brokers

Brokers play a major role in the insurance industry. Every year they collect billions in premiums and place around half of Australia's total insurance business.

It's illegal to act as an insurance broker if you're not registered with ASIC.

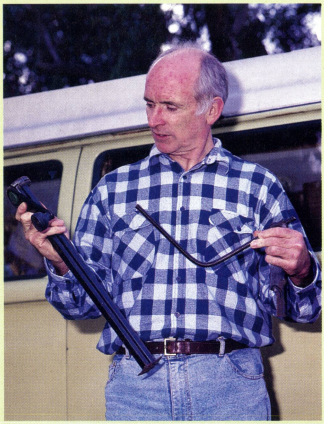
Registered brokers must:

- Pass on insurance premiums to the insurance company within a specified timeframe.
- Have their transactions audited and keep separate bank accounts for insurance premiums.
- Act in the client's interest.
- Participate in an approved complaints scheme.
- Carry professional indemnity insurance.

The Insurance Brokers Dispute Facility is a national scheme available free of charge to consumers. However, it only handles insurance matters up to $10,000 for general insurance and $50,000 for life insurance. You can contact the scheme on 1800 064 169.

CHOICE advice

- Check with ASIC to find out whether your broker is registered.
- If they're unregistered, contact your insurance company to make sure you have a valid policy, and then let ASIC know.
- If you're having difficulty locating a registered broker, call the National Insurance Brokers Association (NIBA) on 1800 333 172 (unless you're calling from Melbourne) or 1800 252 558 (unless you're calling from Sydney) or check their website on www.niba.com.au. NIBA can give you contact details of registered brokers near you.



You're always warned not to use a jack to hold your car up while you tinker around underneath. And this photo shows you why.

Robert, a CHOICE staff member, was changing a tyre when the jack's screw thread snapped and the car came crashing down — luckily he wasn't under it.

Can you help?

Are you retired?

If so, we'd like to hear about your financial strategy:

- When you retired, where did you decide to put your money (annuity, allocated pension, etc) and why?
- What were some of the most important considerations in your financial strategy?
- Are you happy with where you've put your money and the results?
- Who did you consult when you decided on your financial strategy?
- If you could change anything about the way you developed your financial strategy, what would it be?

Please write to us at **Retirement**, CHOICE, 57 Carrington Road, Marrickville 2204; fax us on (02) 9577 3377, or email us at: retirement@choice.com.au by June 20. Your response will be treated with strict confidence — we won't publish any material without your consent.

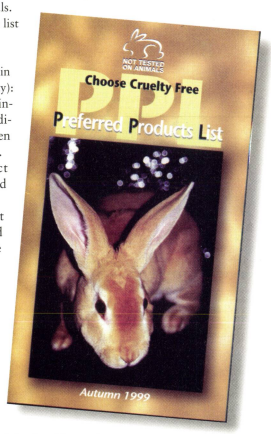
Care about animals?

IF YOU DO CARE ABOUT ANIMALS, YOU'D PROBABLY like whenever possible to buy cosmetics, toiletries, household cleaners and so on that haven't been tested on them. The Choose Cruelty Free (CCF) organisation recently updated its Preferred Products List (PPL) — a list of companies that don't test their products on animals.

Products on the list are categorised according to the following criteria (in order of desirability):

- The product (including its ingredients) has never been tested on animals.
- The product hasn't been tested since 1985.
- The product hasn't been tested in the last five years.

The PPL tells you which criteria each product meets, provides information for vegetarians and vegans, and lists manufacturers' contact numbers.



To get a copy of the booklet, write to CCF at PO Box 12005, A'Beckett Street, Melbourne 3000, or phone them on (03) 9328 1377.

Genetically modified foods fact sheet

Genetically modified foods are now on our supermarket shelves — but do you know what you're eating?

The comprehensive **CHOICE Fact Sheet** presents clear, unbiased information about the risks and benefits of genetically modified foods and the current situation in Australia and overseas. It will help you make informed choices when you shop, and will tell you what you can do to ensure Australian consumers get the safeguards they deserve.

If you'd like a copy of the fact sheet, write to: GM Foods Fact Sheet, CHOICE, 57 Carrington Road, Marrickville 2204, enclosing a stamped, self-addressed business-size envelope.

Smart marketing?

SMART BEANS ARE JELLY BEANS that "actually help you think" — according to the label, at least. And perhaps it's not too far-fetched: a lot of people feel less able to concentrate when they're hungry — and there have been some scientific studies that find a relationship between blood glucose levels and mental performance.

Most of these studies compared people who'd eaten a high-carbohydrate breakfast with those who hadn't. Sometimes they found a relationship between blood glucose levels and ability to perform in some mental tasks, like memory tests, and sometimes they didn't.

In fact, though, breakfast studies aren't an appropriate point of reference, because they look at the effects of a long period of food (and glucose) deprivation (perhaps 14 hours or more). As you're more likely to eat jelly beans as a snack between meals, the situation isn't really comparable.

One study that looked at the effects of mild food deprivation — like your mid-afternoon tummy grumble — found no significant relationship between blood glucose levels and mental performance.

The authors say this supports the hypothesis that the brain is relatively unaffected by short-term food deprivation. This, and the fact that there's no evidence that blood glucose levels affect performance in intelligence tests, makes the contention that jelly beans "actually help you think", let alone the implication that they make you "smart", highly questionable and, we think, misleading.

Got a gripe about gas?

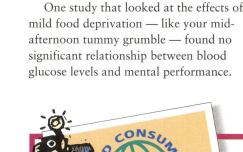
THE ENERGY INDUSTRY OMBUDSMAN's office in Victoria has expanded its existing service to cover complaints about gas retailers. Victorians who have a complaint about their gas or electricity service should first contact the retailer to try to resolve the problem. If that fails, you can contact the EIOV on 1800 500 509 for free, independent dispute resolution. For more information, see its website: www.eiov.com.au.

And the winners are...

The winners of the car reliability survey draw, which included everyone who returned a survey, are:

- **First prize (a Kelvinator 500 L fridge): Toni Wheeler, of Fitzgibbon, Queensland.**
- **Second prize (a Hitachi VCR): Marilyn Anderson, of Wilton, NSW.**
- **Third prize (a Sunbeam electric blanket): Carol Sykes, of Werribee, Victoria.**

Many thanks to everyone who filled in the car reliability survey — it was a record year for responses, which means our report (to be published later this year) will be stronger than ever.



CHOICE is one of many consumer magazines from organisations worldwide that make up Consumers International. Get the lowdown on what's happening with your fellow consumers around the world in World Consumer Snapshot.

Size does matter

The length of condoms in Europe will be increased by 1 cm and their width by 2 mm, says Canada's *Protégez-Vous*. Does this mean male Europeans will be better 'equipped' than before? Apparently not: it's simply about an adjustment of standards already in force in some EU countries.

Monster wines?

Looking for a nice spicy, chocolaty, fruity red to warm you up on a cool winter's night? The UK's *Which?* magazine tested Australian shiraz, and **Wynns Coonawarra Estate Shiraz 1997** was an emphatic winner.

Other high-scoring contenders were the **Maglieri McLaren Vale Shiraz 1996** and **Peter Lehmann The Barossa Shiraz, 1997**.

There were a few complaints about some of the more expensive ones, such as "Too many hot, over-extracted, unbalanced monsters" — don't you just love wine industry vocab? But overall the wine experts liked most of the wines tasted, particularly those from the smaller wine-making areas of Australia.

Talking dirty

Consumer Reports tells us that Americans are spending less time cleaning than they were a decade ago, with a corresponding drop in sales of cleaning products.

Other findings of the large national study of cleaning habits were that women today spend about half the time cleaning compared to 30 years ago (now 15.6 hours per week), while men have more than doubled their contribution (now 9.5 hours per week).

Manufacturers have responded in part by marketing products that mask the problem: apparently sales of air fresheners are booming.

YOURletters

We're always pleased to publish subscribers' letters with useful hints for other consumers.

Intrusive questions

I'm writing because I'm concerned about the CDL *Australian Shoppers Survey*, which I found in my mailbox together with a self-addressed return envelope. I found the questions in the survey very intrusive; indeed I was offended by some.

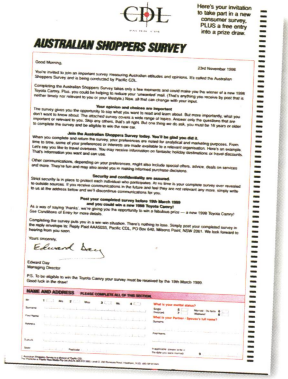
This is the second one of these surveys I've received. I am concerned that some people may not think of the consequences of giving this much personal detail to strangers. Older people with deteriorating mental capacity could be easy targets. While it says it's completely voluntary, the style of the printing makes it look quite official.

L Kelly
Merrylands, NSW

Several CHOICE readers have drawn our attention to Pacific CDL's ***Australian Shoppers Survey*** *and the similar Australia Post* ***Australian Family Lifestyle Survey****, which have been popping up in letterboxes all over the country. They include questions about things like preferred holidays, product brands you buy, household items you're considering buying and more personal information like health and banking. The companies then sell bits of this information to marketing companies, the idea being that you're then sent marketing material suited to your buying interests. There's also the offer of a prize (like a car) for taking the trouble to fill out the form.*

Both CDL and Australia Post point out on the cover of their surveys that the information you provide may be made available to companies and organisations offering products or services relevant to your interests, and therefore can't be said to be trying to mislead anyone into believing otherwise.

If you consider the nature of the questions an invasion of your privacy, or an invitation for unwanted junk mail, simply don't fill it in.


CDL

Here's your invitation to take part in a new consumer survey, PLUS a free entry into a prize draw.

AUSTRALIAN SHOPPERS SURVEY

Good Morning,

23rd November 1998

You're invited to join an important survey measuring Australian attitudes and opinions. It's called the Australian Shoppers Survey and is being conducted by Pacific CDL.

Completing the Australian Shoppers Survey takes only a few moments and could make you the winner of a new 1998 Toyota Camry. Plus, as a thank you for your time, we'll send you a small gift. That's anything you receive by post that is neither family nor relevant to you in your lifestyle. Free, all free and change with your input.

Your opinion and choices count

The survey gives you the opportunity to tell us what you want to read and learn about. But more importantly, what you don't want to know about. The attached survey covers a wide range of topics and it's important that you answer all of them to complete the survey and be eligible for the prize draw. But one thing we do ask, you must be 18 years or older to complete the survey and be eligible for the prize draw.

Join the Australian Shoppers Survey today. You'll be glad you did.

When you complete and return the survey, your preferences are noted for statistical and marketing purposes. From time to time, some of your preferences or interests are made available to companies and organisations offering products or services relevant to your interests. That's information you want and can use.

Other communications, depending on your preferences, might also include special offers, advice, deals on services and more. They're fun and may also assist you in making informed purchase decisions.

Security and confidentiality are assured

Global security is in place to protect each individual who participates. At no time is your complete survey ever revealed to outside sources. If you receive communications in the future and feel that they are not relevant any more, simply write to us at the address shown and we'll discontinue communications for you.

Post your completed survey before: 18th March 1999

As a way of saying thanks, we're giving you the opportunity to win a new Camry!

Our Conditions of Entry for more details.

Completing this survey puts you in a win-win situation. There's nothing to lose. Simply post your completed survey in the reply paid envelope to: Reply Paid AA43322, Pacific CDL, PO Box 640, Milsons Point, NSW 2061. We look forward to hearing from you soon.

Yours sincerely,

Edward Day

Edward Day
Managing Director

P.S. To be eligible to win the Toyota Camry your survey must be received by the 18th March 1999!

Good luck in the draw!

NAME AND ADDRESS PLEASE COMPLETE ALL OF THIS SECTION.

It may look official, but it's just another marketing tool. If you don't want to divulge your life in 112 answers, dump the survey.

Reducing bank fees

I read with great interest your article on bank fees (March 1999). I found a way of decreasing the penalty fee considerably when changing from a fixed-rate mortgage to another.

I had a fixed-rate mortgage with an interest rate of 9.95%. I still had three years left on it, but with the interest rates having dropped considerably since I fixed the rate, I was eager to get a lower rate without incurring unnecessary fees. As the difference in the mortgage payments was nearly $700 a month if I could figure out a way to swap, I really worked hard to change.

The original bank that had provided the mortgage (Bank A) was unwilling to change to a lower interest rate without me paying the full penalty rate of $14,500. However, I was allowed to make extra repayments on the fixed loan without penalties, and the early-payout penalties were to be calculated only on the outstanding balance of the loan.

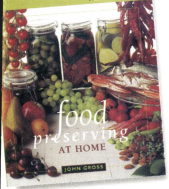
Another bank I approached (Bank B) was willing to lend me the full amount of the loan, and also to give me the money in two instalments. I received the balance of the fixed loan less $2000, so its remaining balance was only $2000. The penalty rates were calculated on this $2000, and not on the amount originally borrowed. One week later, the loan was closed with Bank A.

The savings: $700 a month for three years at a cost of a penalty of only $350 instead of $14,500 — almost $25,000 altogether. It's not every day you can save yourself nearly $25,000 tax-free!

With the banks eager to get and keep your business, they seem more willing and flexible to help you out — at least Bank B was.

A Blinn
via Internet

LETTER OF THE MONTH



We want to hear from you — your experiences help our research and often let other readers know about scams and rip-offs. To thank you for writing to us, *Your Letters* awards a prize of a CHOICE book to the 'Letter of the month'. This month's winner, A Blinn, receives *Food preserving at home*, or any other book of their choice from Consumer Bookshelf, pages 34 to 36.

We're sorry we don't have the resources to answer all your letters personally, and in the magazine we may edit them or print only an extract. See page 2 for how to reach us.

Is *fast* food *fat* food?

It's probably no surprise that the answer's 'yes', but some meal choices are nutritionally better than others.

IN BRIEF

- In Australia nearly two thirds of men and almost half the women are overweight. Is it any wonder when you consider that each year we spend $7.5 billion dollars on fast food?
- In general, if you stick to three slices of pizza, it's better than fast chicken meals and burgers for fat content.
- Similar meals from different chains are much of a muchness nutritionally.

A PURIST WOULDN'T RECOMMEND indulging regularly in any type of fast food if you're serious about eating a balanced diet (see *What's a balanced diet?*, page 10). However, if you do indulge, some options are definitely better than others. We looked at over 20 popular fast-food meals from major fast-food chains — including pizzas, chicken and burgers — to see what you're eating. The table on page 11 shows how they stack up nutritionally.

When comparing normal fast-food meals (hamburgers, chicken and pizza) with one another, three slices of vegetarian pizza from either **PIZZA HUT** or **PIZZA HAVEN** don't look too bad — this choice is reasonably well balanced in terms of the energy that comes from fat and has only one third the fat of a **McDONALD'S Big Mac and fries** and one quarter the fat of a **HUNGRY JACK'S** or a **BURGER KING whopper and fries** or a **KFC 2-piece feed**.

Even if you ate a whole regular-size pizza of six slices of roughly 23 cm diameter (which would be pretty easy for some people to do — a whole pizza is closer in weight to some of the heavier meals in our survey) you'd still come out better in the fat stakes, but not necessarily when it comes to calories. For example, Supreme pizzas give you about the same calorie count as some burger or chicken meals (even more for a **PIZZA HAVEN Extra supreme pan crust**), so if you're watching your weight you need to be aware of this.

Almost all the meals are high in salt, including the three slices of pizza, but a full pizza (especially those containing processed meat) can have a ridiculously high amount. A whole regular **PIZZA HUT Super supreme thin 'n' crispy** would provide 36% *more* than the recommended upper daily limit for sodium.

Healthier choices — are there any?

Happily, you can get better-balanced food from some of the chains if you look beyond the usual choices. The winner is definitely the **RED ROOSTER Skinfree sub meal**, with only 3 g of fat and 438 calories (that's around a quarter of the calories an adult female would probably eat in a day). However, like the other fast-food meals it's quite high in salt.

Second prize goes to **McDONALD'S Grilled chicken burger** (without the sauce) with only 8 g of fat and

When buying pizza from a large chain it appears that nutritionally it's much of a muchness, except that the pizzas from Pizza Hut were generally higher in salt than those at Pizza Haven. Also, the Pizza Haven pan pizza is much heavier than the thin crust (left), so three slices weigh more, giving a lot more calories and slightly more fat than its thin crust equivalent. At Pizza Hut it doesn't really matter if you choose thin or pan crust — nutritionally they're pretty similar.

320 calories. But this isn't as substantial as the **RED ROOSTER Skinfree sub meal** so may not fill you up. As soon as you add fries to this, or even sauce to the burger, the nutritional deal is not so good.

There isn't really anything else that stands out as being a particularly good choice, but of course you can always ask for fries without salt, or burgers without sauce. And common sense will tell you those 'pile it high' options like bacon-double-cheeseburgers are laden with fat.

If you fancy pizza, vegetarian is a good option. Once you start adding processed meat, you're adding more fat and salt. And if a bit of chicken is what you fancy, go for grilled or barbecued, not fried.

And for the kids...

Relentless fast-food advertising combined with kids' persistent nature is an almost unbeatable combination. Any parent who can hold firm against this constant barrage deserves a medal. But for those mere mortals who give in to the kids — don't feel too guilty. As long as it's the exception rather than the rule, and your kids don't think meat and two veg refers to a burger, chips and more chips.

It's much of a muchness between the main burger chains (**BURGER KING, HUNGRY JACK'S,**

What's your fast food fried in?

When it comes to heart health, it's not only the amount of fat, but the type, that's important. Experts advise replacing saturated and trans fat with monounsaturated and polyunsaturated fats, which help lower the level of 'bad' cholesterol in your blood — with monos having the edge. Saturated and trans fats raise the level of 'bad' cholesterol — the kind that causes clogging of your arteries. Trans fats act like saturated fat in the body, and are formed mainly when vegetable oils are 'hardened' to make margarine.

When deep-fat frying, you're better off nutritionally using a poly- or monounsaturated oil than a highly saturated or trans fat, but these are generally more expensive and not as stable for repeated use, so the large chains tend to use highly saturated fats. **HUNGRY JACK'S, KFC** and **RED ROOSTER** use palm oil, while **BURGER KING** and **McDONALD'S** use a mix of beef tallow and cottonseed oil. All these fats, at the same time as being cheap, are very stable for deep-frying.

There are a few oils on the market now that are much healthier nutritionally (containing about 60–70% monounsaturated fats) and are also stable for deep-frying, but as they're much dearer, lower cost wins out over health.

When it comes to a serve, big is not beautiful

It's easy to lose sight of what a sensible serving size really is when we're confronted with ridiculously 'big' options all the time — deluxe burgers, large drinks, large fries, not to mention the 'two for the price of one' meal deals and family feasts that seem too good value for money to pass up — even if your 'family' consists of two people.

Just remember that the 'standard' serve sizes (used on food labels, and those used by dietitians and nutritionists when talking about a 'serve') are normally a lot smaller than this. Here are some examples:

A 'standard' glass of cola is 250 mL. This contains 429 kJ / 103 calories.

A can of Coke is 375 mL. This contains 644 kJ / 154 calories.

A large Coke from McDonald's is 500 mL. This contains 858 kJ / 205 calories.

By drinking a large cola you're getting about 100 more empty calories (contributing nothing other than sugar) than if you drink the standard 250 mL — a small drink from a fast food chain is much closer to a sensible serve.

A 'standard' serve is a quarter of a regular pizza, which contains 1042 kJ / 249 calories.

Pizza Hut Super supreme thin 'n' crispy regular. A whole pizza has 4153 kJ / 992 calories.

Who stops at a quarter of a pizza if they've no one to share it with? Yet that's the 'standard' serve size.

A 'standard' serve of chips is 95 g (1 cup). This contains 16 g of fat.

Large chips from KFC weigh 290 g and contain 50 g of fat.

For a man who eats an average amount (11,000 kJ / 2600 calories), 50 g of fat is over half the fat 'quota' for the day.

What's a balanced diet?

In general a well balanced diet is one that's low in fat (particularly saturated fat), high in complex carbohydrate including fibre, and low in salt. Health experts recommend that ideally no more than 30% of your energy should come from fat. While this refers to your overall diet, it's good to aim for this type of balance within a meal, because the more fat there is in one meal, the harder it is to make up the balance in the food you eat for the rest of the day.

McDONALD'S) — the kids' meal of a burger and fries would provide more than one third of the daily energy needs of a three to four-year-old. Also, it's not particularly well balanced, with over 40% of the energy coming from fat. And if you buy them a sundae to round off their meal you'll add even more fat and calories. Drinks aren't included in our table; a fizzy drink will add sugar and more calories. Try choosing orange juice instead — at least they'll get some vitamin C.

Fast food — nutritionally challenged?

Although we wouldn't recommend fast food as a staple part of your diet, it's not devoid of nutrients. It provides a certain amount of vitamins and minerals, and most meals have some fibre.

McDONALD'S adds resistant starch (which acts in the same way in the body as dietary fibre) to all its burger buns, which boosts the 'fibre' level. But there are better ways of obtaining fibre — fruit and vegetables, wholegrain cereals, rice and pasta, for example. The point is, fast food isn't the best way to obtain even the nutrients it does provide because of the large amounts of fat and sodium that come with it.

Nutritionally, the traditional Aussie tucker of a meat pie and chips is up there with the worst of the fast foods — it's high in salt and provides a particularly high percentage of energy from fat. Battered fish and chips aren't quite as bad, being lower in salt (as long as you don't add more of your own). The fish may also provide some 'good' fat (omega-3s). If you can buy grilled or baked fish instead of battered and fried you can turn a fatty meal into a fairly healthy one.

Does it worry you that the McDonald's grilled chicken burger isn't actually grilled in the way you would expect? It's cooked in an oven, then on a hotplate in the restaurant. The grill marks are applied with hot rollers after the product is cooked.

Table notes

1 Energy

Daily energy requirements vary greatly depending on your age, sex, size and level of physical activity. However, as a rough guide men need about 11,000 kJ/2600 calories and women about 7500kJ/1800 calories. (To convert kilojoules to calories you divide by 4.2.)

2 Sodium

A diet too high in sodium (a constituent of salt — sodium chloride) can contribute to high blood pressure, which in turn is linked to strokes and heart disease, so it's wise to keep your sodium intake down. This is particularly important for older people (65 and over), as blood pressure often increases with age. The upper daily limit for sodium is 2300 mg.

3 Energy from fat

Health experts recommend that no more than 30% of energy in our diet should come from fat. For more on the significance of this, see *What's a balanced diet?*, above, left.

4 Fat

One of the national dietary guidelines is to 'eat a diet low in fat'. Eating too much fat is a major cause of obesity and can also increase your risk of heart disease, high blood pressure, diabetes, gallstones and some types of cancer (bowel, gall bladder, ovary and breast cancer).

Nutritional comparison of meals from major fast food chains

(from lowest to highest fat content)

Outlet	Meal *	Weight (g)	1 Energy (kJ / Cal per serve)	2 Sodium (% of upper daily limit per serve)	3 Energy from fat (% per serve)	4 Fat (g per serve)
RED ROOSTER	Skinfree sub meal: two chicken breast strips, Mediterranean glaze with Kraft Free mayo, lettuce, on 9-inch roll	320	1830 / 438	46	6	3
McDONALD'S	Grilled chicken burger without sauce	206	1340 / 320	35	23	8
PIZZA HAVEN	Vegetarian's choice original crust	3 slices (large **(A)**): 189	1680 / 402	25	29	13
McDONALD'S	Grilled chicken burger with sauce	221	1590 / 380	40	34	14
PIZZA HUT	Vegetarian lovers' thin 'n' crispy	3 slices (regular **(B)**): 204	1710 / 409	41	31	14
PIZZA HAVEN	Extra supreme original crust	3 slices (large **(A)**): 186	1860 / 445	38	34	17
PIZZA HUT	Super supreme grand pan	3 slices (regular **(B)**): 187	2260 / 539	54	33	20
PIZZA HUT	Super supreme thin 'n' crispy	3 slices (regular **(B)**): 216	2090 / 498	68	38	21
PIZZA HAVEN	Extra supreme pan crust	3 slices (large **(A)**): 285	2860 / 684	63	29	23
BURGER KING	Kids Club value meal: hamburger, small fries	187	2250 / 537	33	42	25
HUNGRY JACK'S	Kids Club value meal: burger, fries	193	2430 / 580	33	43	28
McDONALD'S	Happy meal: cheeseburger, small fries	208	2420 / 578	33	42	28
	Battered fish and chips	240	2520 / 601	36	53	36
KFC	Flame grill burger combo: flame grill burger, regular chips	300	2950 / 705	65	45	36
KFC	Quarter barbecue chicken and chips	267	2600 / 621	37	51	36
KFC	Chicken fillet burger combo: chicken fillet burger, regular chips	276	2600 / 621	38	52	37
McDONALD'S	Grilled chicken McValue meal: grilled chicken burger, medium fries	349	3290 / 787	50	41	37
RED ROOSTER	Quarter barbecue chicken and chips	374 **(C)**	3430 / 819	76	40	37
McDONALD'S	Fillet-o-fish McValue Meal: fillet of fish, medium fries	274	3160 / 754	41	44	38
	Meat pie and chips	285	2780 / 664	56	53	39
RED ROOSTER	Chicken roll combo: combo fillet burger, regular chips	348	3820 / 913	58	43	45
McDONALD'S	Big Mac McValue meal: Big Mac, medium fries	348	3820 / 912	43	45	47
HUNGRY JACK'S	Whopper value meal: burger, fries	368	4070 / 972	51	47	52
KFC	2-piece feed: 2 pieces original-recipe chicken, regular chips, regular potato and gravy, dinner roll	425	3870 / 923	60	50	53
BURGER KING	Whopper value meal: whopper burger, medium fries	376	4130 / 986	53	49	55
FRENCH FRIES/CHIPS						
RED ROOSTER	Regular chips	140	1450 / 345	15	38	15
BURGER KING	Medium fries	116	1560 / 372	15	43	18
HUNGRY JACK'S	Medium fries	114	1570 / 375	11	42	18
KFC	Regular chips	117	1380 / 329	6	54	20
McDONALD'S	Medium fries	128	1700 / 407	10	48	22

* Most of the combination meals come with a drink. We didn't include this in the analysis.
(A) Eight slices per pizza.
(B) Six slices per pizza.
(C) The serve of chips we bought with this meal was larger (209 g) than the usual medium serve (140 g).

The McLibel case

In June 1994, McDonald's took two British activists to court for distributing pamphlets that accused McDonald's of exploiting children with advertising, promoting an unhealthy diet, exploiting their staff, and being responsible for environmental damage and the ill-treatment of animals. Three years later, after what became Britain's longest-running court case, the judge found in favour of the defendants on some issues and McDonald's on others.

The judge agreed that McDonald's food is high in fat (including saturated fat), sodium and animal products, and ruled that McDonald's advertising misled people into believing its food was healthy. Although he couldn't agree that McDonald's food is very unhealthy, the judge did find that "... the small proportion of McDonald's customers who eat McDonald's food several times a week will take the very real risk of heart disease if they continue to do so throughout their lives."

Thickshakes — *the last straw?*

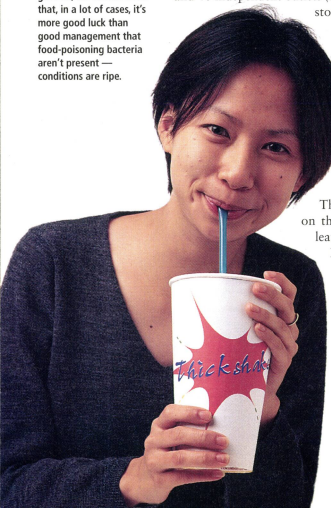
We put 90 thickshakes from a number of chains and independent outlets under the microscope and found that more than half had unacceptable levels of bacteria.

IN BRIEF

- You'd have a hard time finding a thickshake that's as fresh as you'd expect — we were unhappy with the quality of over half of the 90 samples we looked at.
- Over three quarters of the 40 independent outlets we checked in Sydney and Melbourne produced shakes of unacceptable quality.
- While you might expect a more consistent standard within chains, our results show this isn't the case. In a couple of chains the majority of outlets were acceptable, but no single chain was perfect.
- While drinking a thickshake doesn't necessarily mean you'll get sick, our results show that, in a lot of cases, it's more good luck than good management that food-poisoning bacteria aren't present — conditions are ripe.

IN 1996 WE SURVEYED SOFT-SERVE ICE cream because of concerns about its quality. The results weren't good, with more than half the samples being unacceptable. This time we thought we'd take a look at thickshakes, as they're a very similar product: something that contains milk for bacteria to thrive on, and that spends part of its life in a machine where bacteria can easily grow in the various crevices, tubes and reservoirs if given half a chance.

We analysed 90 thickshakes from 50 chain outlets and 40 independent outlets (including small corner stores and milk bars as well as outlets in shopping malls) in Melbourne and Sydney. The shakes were predominantly chocolate because that's the biggest seller.



Not up to scratch

The results show that, on the whole, the quality leaves a lot to be desired. For the results see the table, far right.

More than half of the 90 samples we tested were unacceptable because they had either too many bacteria in general (known as a high standard plate count), which could mean that the product or some ingredient is no longer fresh or past its best, or a large number of coliforms, which can indicate poor hygiene. Some had both problems. Some of the high standard plate counts found were higher than you'd expect to find in milk around its use-by date — not a very good ad for the outlets concerned if that was the reason.

One sample contained *Listeria monocytogenes*. While the majority of people can swallow significant amounts of this bacteria without any obvious ill effects, it can cause miscarriage — and pregnant women might drink shakes to boost their calcium intake. Young children, the elderly and people with weak immune systems (for example, people with AIDS) are also at risk.

Small talk

Counting different types of bacteria can tell you a lot about the condition of a food, so we got microbiologists to look at:

- **Standard plate count** (SPC): This is a count of all bacteria present in the sample and is a measure of general quality. The Food Standards Code specifies limits for ice cream, ice confections and related products (this would be the closest a standard comes to covering thickshakes). These limits specify that you must test five samples, and that three out of five of them should have no more than 50,000 micro-organisms per gram and that no sample can have more than 250,000 per gram. The standard for milk is more stringent and this applies to the product while it's still at the factory. We were a lot more lenient: our cut-off was 500,000 per gram.

Even so, lots of samples failed our benchmark, suggesting unsatisfactory processing, handling or storage by producers or wholesalers, or unsatisfactory hygiene practices or storage at the retail level, or a combination of both.

We found counts as high as 25 million per gram. Though this wouldn't necessarily make you sick, it's not

Two samples contained *E. coli* (from the coliform family), which we consider unacceptable. While most types of *E. coli* won't make you sick, a small number of them can be extremely dangerous (like the type found in Garibaldi salami in Adelaide in 1995).

For more information on the different bacteria and what their presence in the thickshakes might indicate, see *Small talk*, right.

The best and the worst

No one chain was perfect, and there was little consistency within a chain. For example, thickshakes from three **WENDY'S** outlets were of good quality and the other five unacceptable.

HUNGRY JACK'S did the best overall, with some of their outlets having thickshakes with impressively low counts of bacteria. **McDONALD'S** fared quite well too, and we're happy to report that **DONUT KING**, which did particularly badly in our tests of soft-serve ice cream, did quite well this time.

However, **MR WHIPPY** is cause for concern, with thickshakes from all five outlets tested being of unacceptable quality. When we looked at its soft-serve ice cream three years ago, three out of four samples were unacceptable.

The picture looks pretty dismal for independent outlets. Although this survey was by no means exhaustive, it does provide a snapshot of the situation, and finding thickshakes from three quarters of the independent outlets to be unacceptable doesn't inspire confidence.

Both the sample with *Listeria monocytogenes* and those with *E. coli* came from independent outlets.

What to do

Retailers can easily lift their game. First, they can take steps to ensure that their supplier of soft-serve or thickshake mix provides a quality product. They must take care with personal hygiene, store the product at appropriate temperatures and all parts of the machine must be cleaned and sterilised *every* day. They should prepare only enough mix for one day's use; if there's some left over, it must be thrown out, not re-run the next day. ❑

What's a thickshake?

A thickshake is like a milkshake, only thicker. It's usually made from soft-serve ice cream (which is frozen and aerated in a machine) with flavours and milk added. Sometimes the whole thickshake comes from a machine. Some outlets make thickshakes with scoop ice cream, but we didn't look at this type.

How they rate

1 2

Outlet	Number tested	RATING Good	Acceptable	Unacceptable
CHAINS				
BURGER KING	4	2	0	2
DONUT KING	8	1	5	2
HUNGRY JACK'S	8	5	1	2
McDONALD'S	8	4	2	2
MR WHIPPY	5	0	0	5
NEW ZEALAND NATURAL ICE CREAM (A)	9	1	5	3
WENDY'S	8	3	0	5
INDEPENDENTS (B)	40	0	8	32
Total	90	16	21	53

(A) New Zealand Natural Ice Cream didn't have a soft-serve ice-cream machine when we tested, but did have a soft-serve yoghurt machine, so we tested thickshakes made with yoghurt and flavouring — not a normal order. The company tells us it now has a chocolate soft-serve ice cream that can be used to make thickshakes.

(B) These include outlets in shopping malls, corner stores and milk bars.

what you'd expect when you're buying a fresh product.

■ **Coliforms**: The presence of this group of bacteria in processed foods indicates poor hygiene practices throughout the product's life, inadequate processing at the factory (for example, pasteurisation) or possibly both.

We consider more than 100 coliforms per gram unacceptable: 20% of samples had counts greater than this, with some up in the thousands.

■ **E. coli**: The presence of these bacteria can mean faecal contamination (usually due to poor personal hygiene — food handlers not washing their hands after visiting the toilet, for example). We consider the presence of any *E. coli* unacceptable.

■ **Listeria**: Its presence is most likely to mean inadequate cleaning of equipment. The presence of a certain type — *Listeria monocytogenes* — is particularly serious: it can cause miscarriage. We consider any listeria in thickshakes to be unacceptable.

■ **Staphylococcus**: We tested for a certain type of staphylococcus which, at high levels, can cause food poisoning. Fortunately, we didn't find any.

1 Number tested

Roughly half the samples were from Melbourne and half from Sydney, except for **MR WHIPPY** and **BURGER KING**, because there are very few of these outlets in Melbourne.

2 Rating model

■ **Good**

Meets all of the following conditions:
E. coli: Not detected.
Listeria: Not detected.
Coagulase-positive staphylococcus (the type that causes food poisoning): Less than 100 per gram.
Standard plate count (SPC): Less than 50,000 bacteria per gram.
Coliforms: Less than 10 per gram.

■ **Acceptable**

Better than or meeting all of the following conditions:
E. coli: Not detected.
Listeria: Not detected.
Coagulase positive staphylococcus: Between 100 and 200 per gram.
SPC: Between 50,000 and 500,000 per gram.
Coliforms: Less than 100 per gram.

■ **Unacceptable**

Meets one or more of the following conditions:
E. coli: Detected.
Listeria: Detected.
Coagulase positive Staphylococcus: More than 200 per gram.
SPC: More than 500,000 per gram.
Coliforms: More than 100 per gram.

TEST REPORT

Padlocks: size matters

Mid-sized padlocks might seem handy for securing your garden shed or gate — but don't expect them to resist even a casual thief.

IN BRIEF

- For security you need a padlock bigger than the common 40 mm models tested. Thirteen of them did a reasonable job of resisting most of our attempts to open them, but we managed to pry them all open using a large screwdriver.
- The four locks that did best in the tests all have laminated bodies (see photo, below) and hardened steel shackles.

WHAT TO BUY

A bigger padlock! We could pry all the padlocks open with a large screwdriver, and none of them passed all our other tests either, so we wouldn't recommend any of them for securing your valuables. But those that withstood three blows from a hammer (see the table, right, for the list of models) are a better bet than the rest if a bigger padlock won't fit.

Our Best Buy, the ABUS 65/40, isn't far behind the top four locks and it's less than half their price.

YOU'VE SEEN IT ON TV: THE BLACK-CLAD SPECIAL agent, armed with what looks like a toothpick, opening locks with a casual flick of the wrist. Padlocks are even more vulnerable because they hang free, leaving them open to physical force as well as picking. So how secure is the padlock you use to protect your garden shed, bike or tool cabinet?

We tested 25 key-operated padlocks in a popular size for general use: a body width of around 40 mm and a gap of around 20 mm between the body and shackle (see photo, below).

We attached the locks to a secure hasp and tried to open them by hitting them with a hammer, levering them with a screwdriver, sawing and cutting through them and picking them.

Despite their popularity for general use, these padlocks aren't big enough to withstand a prolonged physical attack: we managed to force them all open within 25 seconds. If you want more security, you'll need a lock bigger or better than the models we tested and maybe special anti-theft features, such as a shackle guard.

Thirteen models held out quite well and might have a bit of deterrent value for inexperienced would-be thieves. But the others were very easy to get into — they all succumbed to a few hammer blows and most were easy to pick — and we don't recommend them (see the table, right). ❑

1

Brand / model (in rank order)	Manufacturer distributor
ABUS 41/40 C/EF	Sieper
LOCKWOOD 22940DP	Lockwood Aus
MASTER 1D	Master Lock U
MASTER 2D	Master Lock U
ABUS 65/40 BEST BUY	Sieper
MASTER 140-D	Master Lock U
ABUS 85/40	Sieper
LOCKWOOD 21940DP	Lockwood Aus
LOCKWOOD 23940DP	Lockwood Aus
ABUS 55C/40 mm	Sieper
ABUS INOX T84MB/40 **(A)**	Sieper
ABUS 85IB/40 **(B)**	Sieper
ABUS 85MB/40 **(A)**	Sieper
NOT RECOMMENDED	
AMERICAN L40CC	Locksmiths Sup
AAA L091306	Prager Tools
AUSTCHIN 30356	Harvey Austchi
DRAWBRIDGE SKU 841321	BBC Hardware
QUAL LINE SKU 210706	BBC Hardware
VAULT 40 mm	Blackwell Tradi
ZENITH WLU0040	Proline
MASTER 500D	Master Lock US
BOSTON 40 mm	Blackwell Tradi
NLZ 2374	NLZ Import
VAULT 40 mm Brass Marine **(A)**	Blackwell Tradi
ZENITH WLL0040	Proline

WHAT TO LOOK FOR

Construction

Most padlocks have solid brass bodies that don't rust very easily, but they're fairly soft and vulnerable to physical attack. A tougher alternative is a laminated body — made out of lots of thin sheets of steel or brass sandwiched together (see photo, right). This provides more security, as our test confirmed: the top four models were all laminated.

Corrosion

Steel locks are more likely to rust if left outside, so a brass or marine padlock may be a better choice there.

You may be able to open a rusted padlock using a spray, such as WD40. It's best to prevent rusting in the first place by lubricating the lock: follow the manufacturer's instructions, as abrasive dirt particles can stick to oil and may damage some locks, making dry graphite a better bet for them.

What's the padlock locked to?

Even the strongest padlock in the world won't do you any good if whatever it's locked to can be cut or broken off fairly easily. Make sure the hasp or chain you're locking the padlock to is strong and securely fixed.

Double locking

The shackle of a padlock has a notch cut into it. When it's pushed into the chamber, a bolt slots into the notch, locking the shackle in. Double-locking padlocks have two notches in their shackles, and are held closed by two shackle bolts.

Our tests showed that most locks that were hard to pick had double-locking shackles, but as the other results show, it's no guarantee of security.

This photo of a laminated steel padlock is actual-size — look for bigger padlocks for better security.

et $ ($)*	Origin	2 Warranty (years)	3 Shackle material/ diameter (mm)	4 Body construction	Keys provided	5 Double-locking shackle	RESISTANCE TO: 6 Picking	7 Bolt cutting	8 Sawing	9 Hitting
5	Germany	5	HS / 6.8	Laminated steel	2	✓	Very good	Fail	Good	Pass
0	China	'Material / workmanship'	HS / 6.3	Laminated steel	2	✓	OK	Fail	Good	Pass
0	USA	'Lifetime'	HS / 7.9	Laminated steel	2	✓	OK	Fail	Good	Pass
5	USA	'Lifetime'	HS / 8.0	Laminated brass	2	✓	OK	Fail	Good	Pass
0	Hong Kong	5	HS / 6.4	Brass	2	✓	Very good	Pass	OK	Pass
5	China	'Lifetime'	HS / 6.4	Brass	2	✓	Poor	Pass	OK	Pass
0	Germany	5	HS / 6.0	Brass	2	✓	Good	Fail	OK	Pass
0	China	Not stated	HS / 6.4	Brass	3		Poor	Fail	OK	Pass
5	China	Not stated	HS / 6.4	Brass	2	✓	Poor	Fail	OK	Pass
5	Hong Kong	3	HS / 6.3	Brass	2		Fail	Pass	Poor	Pass
0	Hong Kong	5	B / 6.4	Brass	2	✓	Very good	Fail	Fail	Pass
0	Germany	5	SS / 6.0	Brass	2	✓	Good	Fail	Fail	Pass
0	Germany	5	B / 6.0	Brass	2	✓	Good	Fail	Fail	Pass
0	China	'Lifetime'	HS / 6.4	Laminated steel	2		Fail	Fail	Good	Fail
5	China	Not stated	HS / 6.3	Brass	3	✓	Good	Pass	OK	Fail
5	China	'Fully guaranteed'	HS / 6.4	Brass	2	✓	OK	Fail	OK	Fail
0	China	1	HS / 6.4	Brass	3	✓	Poor	Fail	OK	Fail
0	China	1	HS / 6.0	Brass	3		Fail	Fail	OK	Fail
5	China	'Unconditional'	HS / 6.0	Brass	2		Fail	Fail	OK	Fail
5	China	'Satisfaction guaranteed'	HS / 6.3	Brass	3	✓	Fail	Fail	OK	Fail
5	China	'Lifetime'	S / 7.1	Laminated steel	2		Fail	Fail	Poor	Fail
5	China	Not stated	S / 5.0	Brass	3		Poor	Fail	Fail	Fail
0	China	Not stated	S / 4.2	Brass	3		Fail	Fail	Fail	Fail
0	China	'Unconditional'	B / 5.8	Brass	2		Fail	Fail	Fail	Fail
5	China	'Satisfaction guaranteed'	HS / 5.5	Brass	3		Fail	Fail	Fail	Fail

* Prices shown are a good target to aim for when shopping around, based on prices we paid in December 1998.
(A) Called a marine padlock, with a brass shackle.
(B) Called a marine padlock, with a stainless steel shackle.

1 Rank order

■ Passing the test of being **hit by a hammer** three times (column 9) is the first ranking criterion, as it's quick and easy to whack a lock with a hammer or brick. If a padlock can't withstand this sort of casual attack, it's not recommended.

■ The models that withstood a hammer are listed in order of their **sawing** score (column 8), as most people could easily get hold of a hacksaw.

■ Resisting **boltcutters** (column 7) is next, as a casual or opportunistic thief would be less likely to be carrying them.

■ Resisting **lock-picking** (column 6) was given the least weight: there are much easier ways to break most of these locks.

2 Warranty

A 'lifetime' guarantee means only that the padlock is guaranteed to last as long as it lasts. A warranty for a specific time period is better, but the usefulness of a guarantee essentially depends on the conditions specified by the manufacturer.

A guarantee in any case only means you might get a refund for your padlock: not much consolation when you've just had your bike stolen or your shed raided.

3 Shackle material/diameter

HS — hardened steel; **S** — steel; **B** — brass; **SS** — stainless steel.

The thicker the shackle is, the stronger it is. The metal it's made of is also important — hardened steel will better resist a physical attack, whereas stainless steel and brass are better at resisting corrosion.

4 Body construction

See *Construction*, far left, for the pros and cons of brass versus steel.

5 Double-locking shackle

See *Double locking*, far left, for why this is an advantage.

6 Picking

We used three methods to pick each lock; the longer it took, the better the score.

7 Bolt cutting

If we could cut a lock's shackle with a small pair of boltcutters it failed this test.

8 Sawing

The longer it took to saw through the padlock, the better its score.

9 Hitting

Locks that opened after being hit three times or less with a hammer failed this test.

Share investing can be profitable or a costly gamble. Knowing how to play the game can protect you against losing your money — find out here.

Share investing: *how to do it right*

IN BRIEF

- Shares and share funds should ideally be part of your investment portfolio, because over the long term they can produce a high profit.
- Some managed share funds can generate even higher long-term profits than direct share investments (see *Our verdict*, page 20).
- However, shares are also riskier than other types of investment, so don't buy them with money you can't afford to lose.

MORE THAN 5.5 MILLION INvestors (over 40% of Australian adults) have share investments. Share ownership has had a boost in recent years, with major companies like the Commonwealth Bank, Telstra, Qantas, AMP, Colonial and National Mutual making their shares available to the public by listing on the Australian Stock Exchange (ASX).

If you're totally new to the sharemarket, read *Know nothing about shares?* on page 21, then come back here. If you have a basic understanding of the market and want to invest, how can you minimise the risks and make healthy profits?

How to invest

You can invest in shares directly or through a managed fund.

■ **Direct investments** — with as little as $2000 you can buy a small number of shares in several Australian companies. However, if you've only a small amount to invest, this can be risky. Even if you buy 'blue chips' (large companies with a solid reputation) there's no guarantee they'll grow indefinitely. BHP, for example, was always considered a prime investment, but its share price has fallen by 45% in the last year.

■ **Managed funds** — you invest in the fund and the fund manager decides which companies to invest in. You usually have to pay entry and ongoing fees.

Managed funds hold a mixture of shares, which helps to balance peaks and troughs in individual companies or industries. For example, if you'd invested in a managed fund during the past year instead of buying only BHP shares, BHP may have been one of 40 or 50 shares held by your fund, so the decline in its share price should have been balanced by gains made by other shares.

Direct investment

Buying shares directly gives you control over the selection and management of your investments. However, direct investors need to actively follow the sharemarket. Start with the daily paper. Share prices for most companies on the ASX are quoted in the major daily papers — see page 18 for how to read the information.

The ASX also has lots of information for investors, including:

■ Share prices on ASX ShareNet, at www.asx.com.au.

■ Financial reports from companies and notice of changes in operations or financial position, which it makes available through the media.

■ Monthly Investor Hours featuring industry speakers, and annual ASX share days, as well as share investment courses. For details call customer service on 1300 300 279 or fax 1300 301 279.

■ Investor Select: for $5 you receive an up-to-date report on the company you're interested in, with information on its directors, activities, recent announcements, share price performance and financial results. Contact 1300 300 279 or fax (02) 9227 0885.

Finding a stockbroker

Only ASX members (stockbrokers) or their authorised representatives can buy and sell shares. Not all broking firms provide the same services:

■ **Full-service brokers** provide advice on shares and other investments as well as buying and selling them. They may offer investment and retirement planning services and publish research material. First-time investors should use a full-service broker.

■ **Non-advisory or discount broking houses** buy and sell shares but generally don't provide advice.

■ There's now a growing number of **Internet broking services.** They're convenient and some are quite cheap. If you're going to use an Internet broker, check whether they're full-service or non-advisory. A full list of contacts for Internet broking services is available in the stockbroker referral section of the ASX website.

You'll pay a fee each time you buy or sell shares through a stockbroker. Most have a minimum fee and then a scale of fees that depends on the size of the transaction and type of service: the latter may be negotiable. Brokers generally no longer work to a common scale of fees, so it's important to shop around for the best brokerage rate. Some firms charge a flat fee for transactions up to a certain size. Minimum and flat fees range from about $28 to $120.

You pay government stamp duty each time you buy and sell. The rate is 0.15% of the amount invested and is the same in all states.

The ASX has a stockbroker referral service. Phone 1300 300 279 for details or visit www.asx.com.au. Word-of-mouth is also valuable — ask a friend to introduce you to their broker.

What type of shares?

Shares in different sectors of the market (such as retail, industrial, banking, oil and mining, telecommunications) perform differently at different times. It's ideal to spread your investments across market sectors as well as considering the characteristics of the individual stock. Telstra, for example, performs differently from other telecommunications companies.

Picking individual shares

Many brokers publish regular 'watch lists' of shares worth considering. A typical list will contain two years of estimates for factors that are considered indicators of a share's future performance:

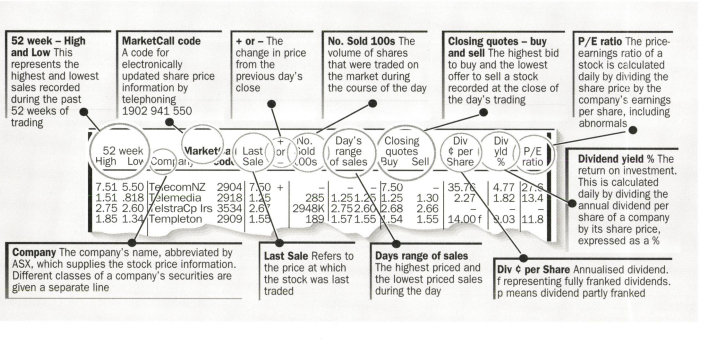
■ **Price-earnings ratio:** The PE ratio is an indication of the market's anticipation of future earnings and of the quality of past earnings. The ratio indicates the number of times the share price covers the earnings per share over the previous 12 months, so shares with a low PE ratio are likely, over time, to

Thanks

Thanks to the many subscribers who wrote and sent emails about their experiences with share investing.

Reading share tables:

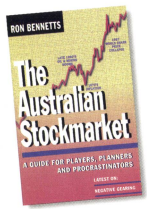
If you choose to invest in shares directly, you need to take a regular interest in how they're performing. The share tables in daily newspapers are an excellent source of information. This is *The Sydney Morning Herald's* explanation of the facts and figures.


52 week – High and Low This represents the highest and lowest sales recorded during the past 52 weeks of trading
MarketCall code A code for electronically updated share price information by telephoning 1902 941 550
+ or – The change in price from the previous day's close
No. Sold 100s The volume of shares that were traded on the market during the course of the day
Closing quotes – buy and sell The highest bid to buy and the lowest offer to sell a stock recorded at the close of the day's trading
P/E ratio The price-earnings ratio of a stock is calculated daily by dividing the share price by the company's earnings per share, including abnormals
Dividend yield % The return on investment. This is calculated daily by dividing the annual dividend per share of a company by its share price, expressed as a %
52 week High Low
Company
Market Call code
Last Sale
+ or –
No. Sold 100s
Day's range of sales
Closing quotes Buy Sell
Div ¢ per Share
Div yld %
P/E ratio
7.51 5.50 TelecomNZ 2904 7.50 + – – – 7.50 – 35.76 4.77 27.6
1.51 .818 Telemedia 2918 1.25 285 1.25 1.25 1.25 1.30 2.27 1.82 13.4
2.75 2.60 TelstraCp Irs 3534 2.67 2948K 2.75 2.60 2.68 2.66 – – –
1.85 1.34 Templeton 2909 1.55 189 1.57 1.55 1.54 1.55 14.00 f 9.03 11.8
Company The company's name, abbreviated by ASX, which supplies the stock price information. Different classes of a company's securities are given a separate line
Last Sale Refers to the price at which the stock was last traded
Days range of sales The highest priced and the lowest priced sales during the day
Div ¢ per Share Annualised dividend. f representing fully franked dividends. p means dividend partly franked

Courtesy of The Sydney Morning Herald

Want to know more?

If you think you know a little about the stockmarket and want to know more, Ron Bennetts' *The Australian Stockmarket, a guide for players, planners and procrastinators*, is available from CHOICE Books. See page 36 to order your copy.



outperform those with high ratios. For example, if a company has shares valued at $8.50 and company earnings of 28.5 cents per share, its PE ratio is $\frac{8.50}{.285}$ = 29.82. The PE ratio is commonly used to show how attractive a share is to investors and to compare one company with another.

- **Dividends:** Part of a company's net profit, which is paid to shareholders as a cash reward for investing in the company's shares. It's usually paid out as a number of cents per share. A healthy flow of dividends is another indicator that a company has strong prospects for future growth.
- **Dividend yield:** This is the dividend you receive expressed as a percentage of the share price — the higher the better. It fluctuates with movements in the share price.
- **Earnings per share:** The company's net profit divided by its total number of shares, usually expressed as cents per share — again, the higher the better.

Another characteristic of a worthwhile stock is **consistent profits.** Long-term stockmarket winners usually have a record of consistent profits that rise each year — but it's not a foolproof indicator.

See *Reading share tables* on page 17 for an example of the form you'll find this information in.

Buying and selling

Once you've selected shares and set up an account with a broker, you can place an order to buy or sell them over the phone.

Your first purchase must be at least one **marketable parcel** of shares, based on the market price of the shares at the time. A marketable parcel may range in value from $20 to over $500.

You can specify the highest price you'll pay or the lowest price you'll accept, or ask the broker to buy or sell 'at best' or 'at market' price for you, based on current buying and selling prices.

Your order will be entered on the Stock Exchange Automated Trading System (SEATS). It matches buying and selling orders based on the price and time they're entered.

If your order is filled, your stockbroker will send you a contract note and you'll usually be required to pay for any shares within three days. If you sell shares, you'll be sent payment.

Managed share funds

Managed share funds have the same general characteristics as shares:

- High volatility, with the potential for high returns (and losses in the short term).
- At least a five to seven-year investment timeframe.

However, there are some significant differences between managed share funds and direct share investment.

With a share fund, your money is pooled with that of many other investors. Specialist managers invest this 'pool' on your behalf. They have the investment buying power of millions of dollars and therefore have purchasing opportunities individual investors don't have.

With a professional manager taking care of the investment decisions, you don't have to spend as much time researching the market.

One of the main disadvantages is that you lose control of ongoing investment decisions. If you're an inexperienced investor or you don't have time to manage your portfolio, though, you may prefer to leave it to the experts.

Advantages of share funds

- **Access to floats:** Because fund managers have substantial funds to invest, they have easy access to large parcels of shares in company floats. They also meet regularly with senior company executives to discuss performance and investment opportunities. For example, during the Telstra float, consumers could buy a maximum of 600 shares. Fund managers could bid for as many as they wanted.
- **Accountability:** Specialist research companies constantly measure and publish the performance of share fund management companies, so they're easily kept accountable for their fund's performance. Ask your financial planner for performance research or look for results in specialist magazines and the investment pages of major newspapers.
- **Low costs:** Most fund managers get low transaction charges from stockbrokers because of the large volumes they trade.
- **Diversification:** Managed funds are well placed

MEETING GIVES INTERESTING INSIGHTS

Patricia Foster of Carlton, Victoria, has been investing small amounts in shares over a long period. To form an opinion about the companies she's thinking about investing in, she reads the annual report and goes to the annual general meeting: "You get the feel of a company, and you'll hear questions about things you wouldn't know about otherwise — disgruntled employees, union leaders, clients, all have an opportunity to speak," says Patricia.

She encourages her grandchildren to be interested in shares and bought some shares for them: "There is risk, but there's risk in anything, even the air we breathe," she says.

Patricia says good record-keeping is needed for your tax return: "If you aren't prepared or able to keep records that are absolutely correct and accurate, then invest in something other than shares."

to respond to changes in the market because they have a large volume of shares spread across a variety of market segments. The number of different shares recently held by share funds ranged from 20 to 331; the average was 91. It would be difficult to own this many stocks as an individual investor.

■ **Low entry level**: You can start with a very small amount and then make regular investments. The minimum investment can be as little as $100.

How share funds work

Investment is via a prospectus, which explains whether the fund aims to provide income, capital growth or both and how risky it's likely to be. The prospectus should also outline how the manager goes about achieving the fund's objectives.

The fund manager or a financial planner can supply a prospectus. To invest, you complete the application form and send a cheque.

You're allocated a number of units based on the amount you invest and the current unit price. For example, if the fund has a current unit price of $2 and you have $2000 to invest, you'll receive 1000 units (less an entry fee, if one is charged).

The unit price reflects the value of the fund's investments. If this rises, the unit price rises. If the value of the investments falls, the unit price falls. For example, in a share fund, the unit price can go up and down daily as share prices move. If, by the time you wanted to sell your 1000 units, the unit price had increased to $3, your investment would be worth $3000.

The return on the fund's investments is paid out in proportion to the number of units you own.

Types of fund

Different funds will invest in different market sectors or share types. The common categories are:

■ **Blue-chip funds:** Funds that primarily invest in the largest companies. They're known for achieving reliable, steady profits, rather than spectacular gains.

■ **Imputation funds**: Primarily invest in shares with franked dividends, for tax advantages (see *Know nothing about shares?* for more on this).

■ **Small-company funds**: Invest in small or emerging companies. They may well be riskier than other investments, but have the potential for high gains.

■ **International funds**: Invest in overseas sharemarkets, which have the potential to achieve higher long-term profits but also have an extra risk factor: the performance of the Australian dollar. If its value goes down against the currency of the country you're investing in, your return rises. If the value of the Australian dollar increases, your return declines.

■ **Indexed funds**: Mirror the performance of the All Ordinaries Accumulation Index, which lists the largest and most frequently traded shares. Rather than actively researching and selecting shares, the manager simply buys the shares that make up the All Ordinaries. This means management fees are usually cheaper and it may be safer, but it's not really high-profit.

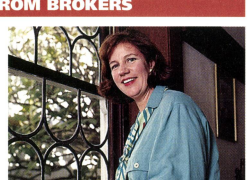
■ There are also share funds that invest in particular **market segments**, such as mining/resources or retail.

Use the daily papers or get your financial planner to compare the performance of several similar funds before making your final choice. Examine each fund's performance over three, five and seven years, but bear in mind that good past performance is no guarantee a fund will continue to perform well. You need to learn as much as possible about the company that manages the fund as well.

Choosing a fund manager

Read the prospectus, along with investment magazines and the daily papers, or talk to a financial planner to find out about different fund managers. A share fund should have a team of skilled investment strategists, economic advisers, researchers, analysts and

BAD ADVICE FROM BROKERS



Being a new investor, Zita rang the ASX in 1997 to get the names of several brokers in her area.

She initially did some trading, as advised by her chosen broker: "I sold some shares that were performing well and bought some which have performed very badly. I think brokers want clients to trade to make money from us. But from now on I'm making all my decisions on my own and using discount brokers," says Zita.

Useful contacts

■ **Australian Shareholders' Association (ASA)**: Represents the interests of shareholders by preparing reports on companies for its members, questioning directors and attending annual general meetings. Phone: (02) 9282 6982; fax: (02) 9212 5636; www.asa.asn.au.

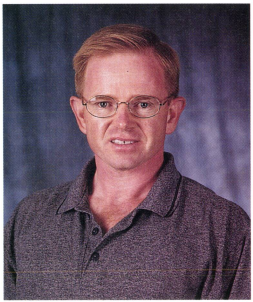
■ **Australian Stock Exchange Customer Service**: Phone: 1300 300 279; fax 1300 301 279; www.asx.com.au.

■ **Financial Planning Association of Australia (FPA)**: Industry association for financial planners. Phone: 1800 626 393; www.fpa.asn.au.

■ **Investment and Financial Services Association (IFSA)**: Industry association for fund managers. Phone: (02) 9299 3022; fax: (02) 9299 3198; email: ifsa@ifsa.com.au.

■ **Australian Securities and Investments Commission (ASIC)**: Phone: 1300 300 630; www.asic.gov.au.

CUT OUT THE MIDDLE MAN



Initially Phil Hattley considered a managed portfolio, but was put off by the fees. He invested in the first float of the Commonwealth Bank instead: "It was attractive to get shares in a blue-chip company without a purchase fee, as you could cut out the middle man," says Phil.

Since then he's invested in the Telstra and Qantas floats. He monitors his share portfolio on the Internet. "As I've had a fairly good increase on my shares in the last months, I've considered selling some to realise a profit and I'm using an Internet broker," says Phil.

a fund manager with a solid background in financial markets and investment management.

It's their job to monitor the fund's performance, handle all administration, and provide regular fund performance information, annual tax statements and tax guides.

How much does it cost?

Some funds have no entry fees, while others charge up to 5%; the average is between 3% and 4%. The entry fee covers the cost of setting up your account and any commissions. It can be paid back to you if you use a fee-based financial planner rather than one who works on a commission.

Ongoing costs – called the Management Expense Ratio (MER) — are taken from the fund before returns are divided between investors. It ranges from 1% to 2.5% across all share funds — the lower the better.

Some funds charge an exit fee if you leave within a certain period of joining. This is usually between nil and 5% (it generally reduces to zero over time). ❑

OUR VERDICT

■ A diversified portfolio of shares will generally outperform other types of investments over the long term. This is true of direct share investments and managed share funds. Figure 2, right, gives the recent value of $10,000 invested in 1984 in a range of difference investments and shows that share investments outperformed all other types of domestic investment over the long term.

■ For most of the past two years, large companies made better profits for direct share investors than small companies, but this trend has changed in recent months, with medium-size companies now offering better capital growth than the Top 50 companies.

■ The All Ordinaries Accumulation Index indicates the health of the sharemarket in general, while individual investors may do much better or worse. It provides a good point of comparison for the health of your own share investments. After fees and costs, the average performance of managed share funds over the past five years has been better than the All Ordinaries Accumulation Index (see Figure 1, below). The best share fund managers have outperformed the Index by a long haul: in the 10 years to June 1995, the 10 largest Australian share funds outperformed the Index by an average of 27.7%.

Figure 1. In the five years to June 1998, share funds outperformed the All Ordinaries Accumulation Index, which is the predominant measure of sharemarket performance.

Know nothing about shares? Read this.

When companies need money to expand, they let investors buy a 'share' of the company's ownership. Those investors can sell their shares to other investors. Because you become an owner of the company, you share in its profits (and with so-called 'ordinary' shares, your liability for its losses is usually limited to the value of your shares).

Characteristics of the sharemarket

Shares (also called stocks) can be valuable investments that can increase in value above inflation, giving you **capital growth**. They can also **generate income** with potential tax benefits. On the other hand, the sharemarket is volatile and the risk of losing the money you invested can be high. Because of this, shares need to be a long-term investment, to let you ride out the lows.

Don't buy shares with money you can't afford to lose or that you may need in the short term.

Spread your capital across types of investment — cash, property, fixed-interest and shares. If you don't have enough money to achieve that spread, think carefully before buying shares.

■ Growth potential

History shows a portfolio of shares provides higher long-term profits (generally called 'returns') than other investments. Figure 2, below, compares the long-term performance of the All Ordinaries Accumulation Index (the main measure of overall sharemarket performance) with other investment types.

■ Potential for income

In addition to capital growth from increases in the share's value, many companies pay shareholders regularly in the form of dividends. These are part of the company's profits, and are usually paid out as a number of cents per share.

■ Protection from inflation

Inflation reduces the future purchasing power of your money. An annual inflation rate of 4% will reduce the value of $10,000 to $5421 in 15 years. If you invest in shares that do better than inflation, your capital's value is protected and increases.

■ Tax benefits

Shares are tax-effective investments:

– If your shares increase in value, you don't pay capital gains tax (CGT) on their higher value until you sell them — and you only pay CGT on growth above inflation.

– Dividend imputation means the company pays tax on the dividend before you receive it, which makes it possible to pay less tax on income from shares. You receive what's called a 'franked dividend'.

■ Liquidity

is the ability to buy and sell as you wish. The sharemarket is highly liquid, in that there is vigorous trading by buyers and sellers, usually in major companies.

■ High volatility and risk

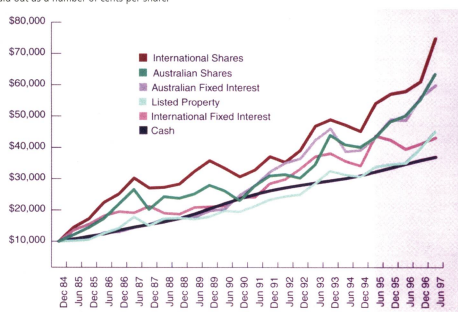
Movements in the market mean the value of your investment can go down — sometimes suddenly. This volatility can lead to losses if you're forced to sell shares at the wrong time. Market slumps can be prolonged — if a share price falls it may take a long time to recover, if it ever does.

■ Invest for the long term

This is the golden rule of share investing. In the past, every time the All Ordinaries Accumulation Index has fallen, it has later eventually risen to a new, higher level.

It's tempting to sell shares when their value falls, but investors who ride out the slumps generally go on to recover and prosper. If you're a long-term investor, short-term fluctuations generally won't be as much of a concern.

Figure 2. This graph shows the recent value of $10,000 invested in 1984 in a range of different investments. Shares compare well with other types of investment for long-term profits.



Source: FPG Research

Who owns shares?

Even if you don't think you own shares, most Australian superannuation funds invest in local and overseas shares. Most Australians already have 15% to 20% of their superannuation invested in overseas shares.

E-waste

Electronic waste at MRI recycling plant, Victoria.

Courtesy of Centre for Design, RMIT

We've got email, e-commerce and e-credit. Now, in the wake of the electronic revolution, we have e-waste. Why is it a growing problem, and what is — and isn't — being done about it?

IN BRIEF

- Disposing of your old computer, television and other electronic goods in landfill wastes valuable resources, and produces large volumes of solid waste and hazardous substances that can leach into the environment.
- Electronic waste is a rapidly growing problem in the developed world, and Europe, North America and Japan are addressing the issue. In general, Australia lags behind other OECD countries.
- The NSW government has sponsored some ground-breaking initiatives in computer and mobile phone battery recycling — four tonnes of mobile phone batteries were collected over two months in Sydney alone.
- You can help — see *What you can do*, page 24, and visit our website: www.choice.com.au.

AUSTRALIANS LOVE TECHNOLOGY and electronics, and our consumption (per capita) of these products is among the highest in the world. Nationwide it's estimated that there are about 10 million televisions, five million computers, six million mobile phones, and countless millions of other electrical and electronic goods in homes and offices. But sooner or later they'll end up as millions of tonnes of metal, plastics, glass and composites on the scrapheap — or, more likely, in landfill.

It's only recently that sending electronic waste to landfill has been widely recognised as a problem, with the main concerns being:

- **The sheer volume.** None of it is biodegradable. Potential landfill sites are becoming more and more scarce, and federal and state waste authorities have acknowledged the need to reduce the amount of solid waste we produce.
- **Wasted resources.** Once the goods are consigned to landfill, the component materials are essentially irrecoverable. However, many of them, such as gold, silver, platinum, palladium, copper, nickel and cadmium, are valuable or scarce. Others, like plastics and other metals, are potentially recyclable.
- **Hazardous materials.** Electronic waste contains some highly toxic and dangerous substances, such as lead oxide, PCBs, mercury, brominated flame retardants and cadmium. Leaching of these substances from landfill into surrounding ecosystems and water sources poses the greatest environmental threat from electronic waste.

Recent clarifications to the Basel Convention on export of hazardous waste have made it harder to export discarded electronic goods containing hazardous components (including monitors, circuit boards, mercury switches and PCB capacitors). This means the electronic waste is considered too dangerous to ship off to other countries — and yet there are no regulations to stop it going to landfill here.

Functional obsolescence

Electronic waste is by no means a recent problem, but the current pace of technological change and consequent product obsolescence means it's a rapidly increasing one.

Obsolescence affects **computers** in particular — these days it seems models are superseded almost as soon as they hit the shops. While many people are happy to hang onto their computer for several years, advances in software and accessories compel others to continually upgrade.

- The **millennium bug** will render electronic components in some products obsolete. This involves not only computers, but any electronic equipment that uses automated systems, from lifts to aircraft (see CHOICE, June 1998, for more on the millennium bug). To avoid problems, these components will have to be upgraded or replaced — which means more waste.

■ The introduction of **digital communications and broadcasting** is making some analogue equipment — like mobile phones and televisions — obsolete.

Analogue mobile phones will be obsolete in most areas by January 2000, meaning you'll have to buy a digital phone if you want to stay verbally mobile. The NSW government has funded a recycling scheme for mobile phone batteries — see *Electronic recycling initiatives*, page 24.

Digital television broadcasting, which will be phased in over the next 10 years, is unlikely to have a great impact initially, largely due to the high cost of high-definition television (HDTV) sets. It will also be possible to continue using your analogue TV with the addition of a signal converter. But sooner or later people will upgrade in greater numbers — witness the rapid demise of vinyl records soon after CD technology was introduced.

They don't make 'em like they used to

The other major contributor to electronic waste is products that break down. These days, thanks to modern production processes, the cost of repairing products compared with buying new ones is high. This has long been the case for small, cheap appliances such as hair dryers, toasters and electric kettles, and is becoming increasingly so for more expensive products like TVs, videos, stereos and so on.

It's expected that the proposed GST will make electronic goods cheaper and increase their purchase and disposal, because at the same time the cost of repairs (which tend to have a high labour component) will become comparatively more expensive. The Television and Electronic Services Association (TESA), which looks after the interests of electronic repairers, argues this will not only have an impact on the environment, but also cost jobs.

Where to from here?

Some countries, particularly in Europe, encourage extended producer responsibility (EPR), whereby manufacturers and importers of electronic goods take greater responsibility for their products at end-of-life.

EPR also involves product design and manufacture: improving product durability, making them easy to repair, and including modular components so they can be upgraded. All of this helps to extend a product's life, and so reduce waste.

Designing products so they're easy to dismantle (called design for disassembly, or DFD) and labelling plastics so they can be readily identified make it more viable to reuse or recycle components when the products eventually die.

But none of these initiatives is very useful if the products end up in landfill. Ideally, they should go back to the producer for dismantling, recycling and reuse of components where appropriate, and treatment of hazardous materials.

At present there's little incentive for manufacturers in Australia to take responsibility for products at the end of their lives. While some companies have found benefits in doing so (for example, Fuji Xerox — see *Electronic recycling initiatives*), it's yet to be widely adopted. It's up to government and consumers to help make it happen.

The role of the government

The Federal Government recognises it has a key role to play in waste management and an obligation to address associated environmental issues. However, electronic waste is largely the responsibility of the states and territories. Industry representatives claim the lack of a national policy makes it difficult for industry to develop a coherent national strategy, as regulations may vary from state to state.

The NSW government is acknowledged as a leader in dealing with electronic waste, and the NSW Environment Protection Authority (EPA) has awarded grants to computer company Compaq and the Australian Mobile Telephone Association to recycle computers and mobile phone batteries respectively (see *Electronic recycling initiatives* for more on this).

Most other states are currently looking into the issue. The Western Australian EPA has grants available, although they're yet to be taken up by electronics recyclers, and the Victorian government has a database of recycling companies on its website, including those that recycle electronics.

In many countries, including Japan, Norway, The Netherlands and Switzerland, governments are drafting or have passed EPR legislation. As a consequence, manufacturers (including those that export to these countries) are moving towards environmental design and taking back their products at the end of their life.

Environmental design specialist John Gertsakis, from the Royal Melbourne Institute of Technology's Centre for Design, co-authored the first major report on electronic waste in Australia, *Short circuiting waste from electrical and electronic products*. He says, "With the exception of some ground-breaking NSW government initiatives, Australian industry and government lag well behind most other OECD countries."

He also notes that keeping electronic products out of landfill will become less of an environmental issue and more of a commercial imperative — that is, manufacturers that don't conform won't be able to sell their products in countries with EPR legislation, and many consumers prefer to buy 'greener' products. There's growing evidence across Europe, North America and Japan that this is already happening.

Further information

See our web page for further suggestions on what to do with your unwanted electronic goods — go to www.choice.com.au and follow the links to Energy and Environment. Do you have any suggestions? Write to us at: E-waste, CHOICE, 57 Carrington Road, Marrickville 2204; fax us on (02) 9577 3377 or email us at: ewaste@choice.com.au.

The Centre for Environmental Design, RMIT, has a free booklet called *Return to sender — an introduction to extended producer responsibility*. Phone: (03) 9925 3485; email: john.gertsakis@rmit.edu.au; website: www.cfd.rmit.edu.au.

Companies with recycling initiatives discussed in this article are:

- **Australian Mobile Telephone Association (AMTA): phone: (02) 6230 6055; website: www.amta.org.au.**
- **Compaq computers: phone: 1300 368 369; website: www.compaq.com.au.**
- **Fuji Xerox Australia: phone: (02) 9856 5000; website: www.fujixerox.com.au.**

What *you* can do

As always, the way to prevent waste is to reduce, reuse and recycle. As a consumer, you can:

- Hold on to your electronics for as long as possible: repair rather than replace appliances, ask yourself whether you really need the whiz-bang features on the latest stereo or video, and upgrade computer components where possible (instead of buying a whole new system).
- Instead of sending broken appliances to the tip, look for green alternatives such as recyclers, take-back schemes and repairers. There are some suggestions on our website — see *Further information*, page 23.
- Support companies with ecological sustainability initiatives, like take-back schemes and pro-environment design (such as durability, design for easy repair or upgrading, and DFD). And, of course, support the initiatives themselves. CHOICE usually highlights environmental issues concerned with electrical appliances in our test reports, and notes any brands and companies with an environmentally responsible approach or product features.
- If you have any creative ideas for using broken or obsolete appliances or know of someone who collects and fixes them, let us know and we can add them to the list on our website. ❑

Electronic recycling initiatives

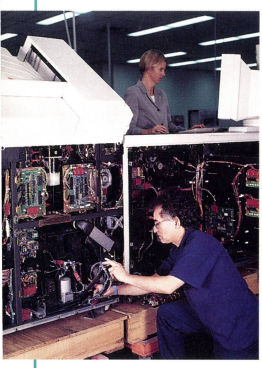
Mobile phone batteries

In our last article on mobile phones (see CHOICE, Jan/Feb 1999) we reported that the Australian Mobile Telephone Association, in conjunction with the NSW government and recycling company MRI, recently started a battery recycling trial in Sydney. In the first two months it collected over 38,000 batteries — that's four tonnes!

It's now planning to go nationwide, and is looking at the possibility of expanding the scheme to include:

- NiCad, NiMH or Li-Ion batteries from other equipment (such as power tools, cordless phones and notebook computers).
- Mobile phone handsets and accessories.

Contact AMTA to find out about participating stores and manufacturers (see *Further Information*, page 23).



A Fuji Xerox technician examines a 'remanufactured' photocopier.

Office machines

The Xerox corporation is recognised as a world leader in extended producer responsibility (EPR) initiatives, and Fuji Xerox Australia operates a model 'remanufacturing' facility in Sydney.

The process starts with product design — photocopiers are designed so it's easy to replace parts for maintenance and repair, which also makes them easier to disassemble at end-of-life. When the machines are returned to the company, they're stripped down to their component parts and cleaned. The parts are then 'remanufactured' — that is, they're used to make new machines or used for spare parts. Any parts that can't be used in the remanufacturing process are recycled, and very little of the original machine goes to landfill.

The remanufacturing process has been very lucrative for the company. Because it provides over 60% of the company's parts requirements, last year it saved the company $17 million by reducing the need for imported parts and materials. It has also provided 150 jobs, and prevented hundreds of tonnes of waste going to landfill.

For more on remanufacturing, contact Fuji Xerox — see *Further information* for details.

Computers

Compaq, in conjunction with the NSW government and recycling company MRI, is running a trial take-back scheme from June this year. It will be aimed initially only at corporate users in the Sydney metropolitan area, and it's expected this will provide a model for recycling programs Australia-wide. The take-back scheme involves both computers and monitors of any brand, and materials will be reused, where possible, or recycled.

If you want to know more, see *Further information* for contact details.

Somewhere to start

Computer loan schemes

Technical Aid to the Disabled (TAD) lends secondhand computers to people with a disability for a minimal fee. It accepts donations of PCs (486 or later) and is also very keen to get hold of printers and other peripherals (such as modems and CD-ROM drives).

Some branches take broken computers and either fix them or cannibalise them for spare parts. However, many branches don't have the resources to do this, and can only use those in good working order; some also take Macintoshes. The Victorian branch doesn't take computers at all (but see below for an alternative). Contact your state office of TAD for more information.

The Equipment Recycling Network in Victoria on (03) 9879 5211 runs a computer recycling scheme similar to TAD in other states, and also distributes them to people (especially children) with disabilities. It prefers 486 or later PCs in good working order.

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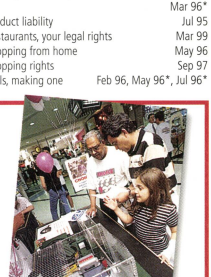

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Antioxidants — health in a pill?

Finding it hard to eat enough greens? Can pills substitute for fresh produce?

SCIENTISTS HAVE LONG PUZZLED over why people who eat lots of fruit and vegetables are less likely to develop diseases like cancer and heart disease. Of course, fresh produce is generally low in fat and rich in fibre, but there's something more.

Part of the benefit appears to come from antioxidants — substances that defend our body against the ravages of free radicals (see *Free radicals are bad, antioxidants are good*, page 31).

One of the first antioxidants to catch the attention of researchers (and the vitamin supplement industry) was beta-carotene, which the body turns into vitamin A. Rich sources of beta-carotene include orange, yellow and green leafy vegetables and fruit. It was observed that people who ate a diet rich in beta-carotene got less cancer.

Unfortunately, beta-carotene didn't show great results in major trials designed to see whether taking extra as a diet supplement could ward off cancer. Worse still, beta-carotene from pills unexpectedly *increased* rates of cancer for smokers in two large trials. The evidence was clear. When beta-carotene was taken out of food it didn't do the same job.

Studies looking at the effectiveness of two other vitamins with antioxidant properties — C and E — have also had mixed results. At this stage it's not clear whether vitamin C in pills can cut the risk of cancer and it doesn't appear to reduce the risk of heart disease. However, vitamin C might provide some protection against loss of sight associated with cataracts in older people.

Vitamin E appears a bit more promising against heart disease. People who eat more foods rich in vitamin E tend to have a reduced risk of heart disease, but the picture for vitamin E supplements is

IN BRIEF

- **If you don't eat enough fruit and vegetables you're probably missing out on important disease-fighting antioxidants.**
- **Getting your antioxidants from food rather than pills is the surest and safest bet.**

Is Juice PLUS+ worth the fuss?

"The next best thing to eating fresh, raw fruits and vegetables," claim the latest nutritional supplements from **JUICE PLUS+**. The two products — one 'fruit blend', one 'vegetable blend' — are marketed as 'whole food supplements', made by juicing a variety of fruits and vegetables, drying them and putting them into capsules. The theory is that this type of supplement includes all the nutritional goodies that other pills leave out.

It's difficult to assess the nutritional value of **JUICE PLUS+**. The manufacturer says its processing method and the exact contents are a secret. However, we did find one study that compared their antioxidant potential with a comparative sample of dried fruit and vegetable extracts. After chemical analysis, the researchers concluded that one capsule of **JUICE PLUS+** roughly equalled 10 grams of fresh fruit or vegetables. That's an incredibly small amount; for example, an average orange weighs about 150 grams.

Based on this analysis CHOICE suggests you spend your money on the real thing — you may even have some left over to have your favourite fruit and vegetables delivered.

Spend your money on real fruit and veges — you'd need to swallow an awful lot of these capsules to come close to the real thing.

ANTIOXIDANT PILLS

Tomato sauce is rich in the antioxidant lycopene, but it may not compensate for a diet of fatty foods like meat pies.

less clear. One large study involving 34,000 post-menopausal women showed that vitamin E could be beneficial when it comes from food, but not in pills. So, while some studies show no positive effect from supplements, others do. We'll know more about vitamin E in a few years with the results of more trials.

New antioxidant heroes?

While the scientific jury is still out on vitamins C, E and beta-carotene, the research spotlight is now shining on the thousands of naturally occurring substances not generally regarded as nutrients — at least until now. These so-called phytochemicals (*phyto* means plant) include whole families of seemingly obscure substances that could be the real antioxidant heroes.

For example, in one study researchers looked at the diets of 48,000 men, revealing that those who ate the most lycopene, which comes from tomatoes and tomato products, were least likely to get prostate cancer. Like beta-carotene, lycopene belongs to a group of compounds called carotenoids, but it appears to be a more powerful antioxidant.

Weight-for-weight, concentrated tomato products like tomato paste and sauce have more lycopene than tomatoes themselves. Interestingly, processing tomatoes or cooking them in oil also helps release more lycopene.

Eating enough of another carotenoid, lutein (spinach is a rich source), has been associated with less degeneration of the lens of the eye that leads to blindness in older people.

Antioxidants can also be found in a tipple. It's thought that polyphenols, quercetin and resveratrol in red wine may explain why the French have less heart disease despite a diet high in cholesterol-raising saturated fat. Similarly, flavonoids in green tea may be partially responsible for fewer deaths from heart disease in Japan.

These are just a few of the vast array of potential antioxidants in our foods. See *Where to find antioxidants*, right, for additional antioxidants and where they can be found.

OUR VERDICT

Eating more fruit and vegetables could be one of the best things you can do for your health, particularly if you currently don't eat much of them at all.

The evidence so far suggests that benefits come from a combination of substances in foods working together. Variety is the key, so that you get different kinds of antioxidants and other potential health-enhancing compounds.

What about supplements?

There are mixed views on the vitamin antioxidants, and many scientists are waiting for the results of further studies before making recommendations about the use of supplements.

The more common supplements include:

- **Beta-carotene:** Don't bother with it. The evidence indicates you won't get your money's worth. If you smoke, definitely don't take it, but better still, stop smoking.
- **Vitamin C:** There's no proof that it helps decrease the risk of cancer and heart disease, but it's unlikely to be harmful. It may turn out to have some benefit, but at levels you can quite easily get from food.
- **Vitamin E:** This shows the most promise, at least for those who already have heart disease, but overall the evidence is still very sketchy.

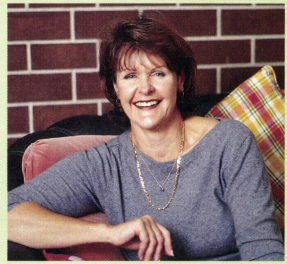
What's more certain is that there's not enough evidence that large doses of these or other nutrients can make you healthier. Nor is hedging your bets by taking a range of individual antioxidant supplements likely to provide the answer. Researchers don't know much about how individual supplements interact, and they can't exclude the possibility of harm from some combinations.

Finally, for some people, taking a supplement may make them less inclined to make other important health-enhancing changes to their lifestyle. Not smoking and avoiding excessive drinking could be much more important for reducing free-radical damage to your body and improving health.

No silver bullets

Given the complex chemical make-up of foods, the search for an antioxidant silver bullet may be in vain. Many scientists now believe it's the synergistic cocktail of protective compounds found in fruit and vegetables that hits the target. This view allows for the possibility that some undiscovered substances may have even more potent antioxidant activity or that some phytochemicals may not act as antioxidants, but will protect against disease in other ways.

One thing's certain — we'll hear more hyped-up media reports, just like those that beta-carotene attracted in the early 1990s, before we have all the answers. In the meantime, CHOICE suggests you head off to the fruit and vegetable shop, where you'll find an abundance of nutritious and delicious antioxidant-rich foods, rather than to the supplement shelf in a pharmacy or health food shop. ❑



Chris is 49 and has been taking vitamin E pills since her father had his first heart attack 20 years ago. Even though there's no definitive evidence yet that they have any beneficial effect, she hopes to be proved right in another 20 or more years.

Free-radicals are bad, antioxidants are good

Oxygen is essential for life, but its use in the body's normal processes creates chemicals known as 'free radicals'. These have 'unpaired' electrons, and so they try to steal them from other molecules. These attacks damage the body's cells — a process called oxidation.

As well as affecting the rate at which we age generally, research suggests free radicals can:

- Start cancers by damaging the DNA (genetic material) in cells.
- Increase heart disease by making LDL cholesterol (the type that causes clogging of the arteries) more likely to stick to artery walls.
- Produce cataracts and encourage degeneration of the lens of the eye that ultimately leads to blindness.
- Contribute to inflammation of the joints, as in arthritis.
- Damage brain cells, promoting neurological conditions such as Parkinson's or Alzheimer's disease.

Antioxidants come to the rescue and neutralise free radicals. Although the body produces its own antioxidants to deal with the free radicals produced each day as part of normal oxidation in the cells, an overload — caused by smoking, pollution, radiation from the sun or X-rays — may leave the body's systems unable to cope. That's when you need plenty of antioxidants in your diet.

Where to find antioxidants

- **Carotenoids:** There are over 600 carotenoids, of which about 50 can be present in our diet. They include: **beta-carotene** found in orange and yellow fruits and vegetables such as carrots, pumpkin, yellow squash, rockmelons, apricots, mangoes and paw paw, and in dark green leafy vegetables like spinach and parsley; **lycopene**, the red pigment in tomatoes, watermelon and pink grapefruit; **lutein**, found in green leafy vegetables like spinach and also in yellow vegetables such as squash; **alpha-carotene**, in similar foods to beta-carotene; and **cryptoxanthins** in mangoes, paw paw, red capsicum and pumpkin.
- **Flavonoids:** Found in tea, especially green tea, onions, red wine and red grape juice.
- **Vitamin C:** Found in many fruit and vegetables, including oranges, blackcurrants, strawberries, grapefruit, kiwi fruit, potatoes and peas.
- **Vitamin E:** Unlike other antioxidants, vitamin E is found in the fatty parts of foods. Vegetable oils, margarine, mayonnaise, wheat germ, nuts and seeds are good sources, with smaller amounts in most fruit and vegetables.

How many servings of fruit and vegetables should I eat?

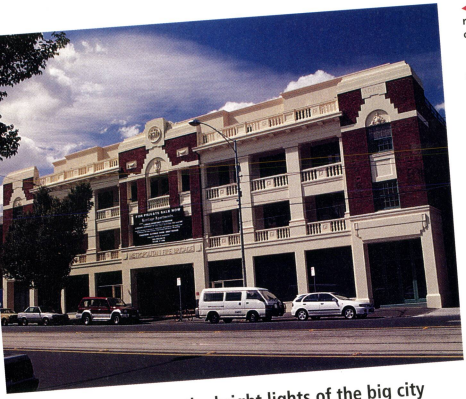
There's no set daily amount of fresh produce that's guaranteed to provide all the antioxidants our bodies need. The goal should be to eat a wide variety of coloured fruits and vegetables all year round.

Five serves a day in total of fruit and vegetables is a good starting point, and more is even better.

A serve of fruit is about one medium-sized piece — an orange, for example; or two small pieces of fruit like apricots and plums. A serve of vegetables is half a cup of cooked vegetables or a cup of salad.

In the future some foods might provide bonus quantities of antioxidants. Scientists are developing 'super-vegies' by tweaking the genes in plants to increase their antioxidant levels. We might see beta-carotene-enhanced carrots and tomatoes topped up with lycopene, for example.

Inner-city apartments — *seeing through the razzle dazzle*



Staring down at the bright lights of the big city from an inner-city apartment may sound attractive, but is it a good investment?

IN BRIEF

- With a huge increase in inner-city residential developments, prices are currently artificially high to cover development costs and the market could well be oversupplied. Will you even get back what you paid for a new apartment?
- If you really want to buy into this market, compare a lot of properties and look for scarcity value (see page 33).

IF YOU'RE LOOKING FOR A RENTAL PROperty as an investment, there are a lot of inner-city apartments around at the moment that may look attractive. But when they're no longer shiny and new, is anyone going to want to buy or rent your property? How can you protect yourself?

It's time, not timing, that matters

The first thing to remember is that property is a long-term investment. Negative gearing or depreciation, which you can use to reduce the amount of tax you pay, should be the icing on the cake — not the reason to invest. Nor is it wise investing to just cash in on Olympic fever (or its ripple effect in other cities). Traditional investment wisdom recommends holding onto property investments for the long term in order to make a profit when you sell.

◀ **Buying something special can help your apartment retain its long-term value — maybe a good restoration or some innovative architecture.**

In addition to these general rules, the changes currently proposed to personal and business taxes mean that now may not be the best time to be buying an investment apartment based on tax advantages. It could be wiser to wait until these issues are clarified, and you know how your income, depreciation and capital gains will be affected.

Strength in numbers?

The growing number of inner-city apartments may seem to indicate a strong market, but it could lead to problems down the track. Between 1981 and 1993 the City of Melbourne gained 118 residential apartment developments each year on average; between 1994 and 1997, an average of 882 residential properties were approved annually.

In Sydney, prior to 1991 there were 17 residential apartment buildings in the CBD. Between 1994 and 1999, 56 residential apartment developments were completed, providing an additional 6433 units. What's more, there are a further 38 residential apartment developments under construction, creating at other 4643 units.

But how many inner-city residential properties do our capital cities need? Sooner or later the market will reach oversupply. When that happens the investments could lose value, especially if they dated or look the same as all the others.

Are you paying what it's worth?

It's hard to tell how close we are to an oversupply market at the moment because prices for buying renting these properties are set by the developers. These prices reflect their costs and profits, not much the market thinks the apartments are w

Another reason for these artificial prices is many people are prepared to pay a premium brand-new apartment. It's estimated that in areas buyers are spending $20,000 to $50,000

than a property is worth. Evidence of this is emerging as properties age and are being resold well below the original sale price.

Some developers also offer guaranteed rental returns of around 6% to 8% of the property's value by acting as a property manager for a set amount of time — up to five or 10 years, depending on the length of the lease they've negotiated.

The rent paid for these properties is set by the developer. Again, the 'newness' of the properties could be leading to artificial returns on the investment that are yet to be market-tested. There's no way of knowing how much rent you'll receive when the guarantee period runs out.

Buying off the plan?

When you buy off the plan all you see is an off-site mock-up of the apartment. While details about the finish are included in the contract, you may still be disappointed with the final property. It's also very hard to get an impression of the position of your unit in the block, its view, the natural light and noise levels.

In Melbourne there's some incentive to buy off the plan. Victorian stamp duty is calculated on what the developer has already spent, so if you buy very early you don't have to pay much stamp duty at all. In other states there's no good reason to buy off the plan unless it's a unique development and you want to reserve a particular property.

Smart investing

The best way to make an inner-city property investment work is to buy a property that will stand up as a long-term investment so you'll make money when you sell it.

First, you don't want to pay more than the property's worth. So buying something that's already been sold once or twice means it's been tested in the market. That way you don't have to worry about an artificial price that's based on how new the development is.

Do your homework

- Think about how the apartment and the building will look when you want to sell it. Will you be able to refurbish it easily, or will it simply be too dated?
- If you're buying a new apartment, look for a developer who's already had some success. Find an older development that they've built so you can get an idea of how well the property you're considering will stand up over time.
- Units with a specific use such as student accommodation or serviced apartments may have a limited life as an investment. Buying something that can have more than one use means you can keep your options open. You may want to consider living in it yourself at some stage.
- Look at as many developments as possible before you buy, and compare apartment sizes, fittings, parking and facilities. Visit an apartment at different times of the day to find out how much natural light it gets and how noisy it is. Ask yourself — would you want to live there?

Look for something special

Like buying antiques, 'scarcity value' can help preserve the long-term value of your apartment. Is the property well located, preferably right in the inner city or CBD as opposed to on the fringes? Does it offer something the others don't, such as classic architecture? If so, it should retain or even increase its value ahead of inflation.

Conversions of older buildings may offer a better chance of scarcity value, especially if the refurbishment is in keeping with the rest of the building. Look for a property that's faithfully restored inside as well as out — you don't want it to feel like every other apartment once you've opened the door.

If the scarcity value you're depending on is a view, think carefully. Is there any way it could be obstructed or lost by another development or changes in town planning?

Get independent advice

If you still want to make this type of investment and your homework hasn't told you everything you want to know, get independent financial advice and a property valuation. There have recently been several disturbing examples of people paying from $10,000 to $100,000 more than the real value of properties on the Gold Coast.

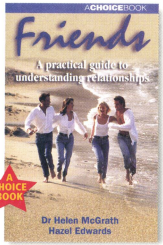
In many cases, developers offer to arrange finance, which is a disincentive to shop around. As a result buyers aren't discovering the true value of the apartment.

Before you invest, get professional advice from someone who isn't associated with the development, and shop around for a loan to make sure you get the best deal. For more information on investing in property see *Buying an investment property*, CHOICE, October 1997. ❑

There are a lot of good reasons for not buying an apartment 'off the plan' — see left for details.

CHOICE BOOKS

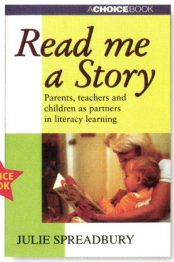
So far in 1999 CHOICE has released . . .



Friends

Friendships are some of the longest and most important relationships in our lives. *Friends* is a guide that will help you understand these relationships. It includes real-life case studies, questionnaires and quizzes that will help you evaluate your friendship potential, and strategies that will help you build, nurture and keep your circle of friends.

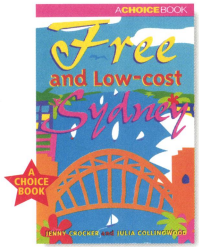
$17 Code: FREN


A CHOICE BOOK
Read me a Story
Parents, teachers and children as partners in literacy learning
A CHOICE BOOK
JULIE SPREADBURY

Read Me A Story

Read Me A Story explains how parents and teachers can work together with children to foster not only literacy learning but also a love of books and reading. It looks at the importance of parents as children's first teachers, emphasises the need for interaction between adult and child when reading aloud in the home, and gives parents and teachers practical ways to link homes and school to encourage reading.

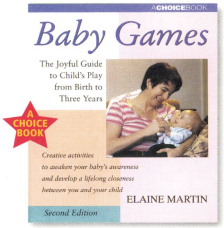
$13 Code: RMAS



Free and Low-cost Sydney

"This wonderful book . . . has ideas for both adults and children and it ranges across Sydney's bumpy but beautiful cultural landscape, both ethnic or geographic." The Sydney Morning Herald Each entry includes contact numbers (and web addresses), opening hours, addresses, charges (if any), maps and tips on transport for activities outside the CBD.

$15 Code: FLCS

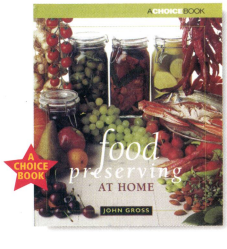

A CHOICE BOOK
Baby Games
The Joyful Guide to Child's Play from Birth to Three Years
A CHOICE BOOK
Creative activities to awaken your baby's awareness and develop a lifelong closeness between you and your child
ELAINE MARTIN
Second Edition

Baby Games

Playing with your baby creates special bonds of love, communication and caring that will last a lifetime. As your child grows from infant to toddler to preschooler, *Baby Games* supplies rhymes, songs, finger plays, activities and games to help create a magical childhood.

Whether you're a new parent who has forgotten the words to 'Rock-a-Bye Baby', or an experienced parent who needs some new ideas for the nursery, *Baby Games* is your guide to playing joyfully with your child.

$20 Code: BGCB



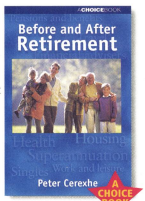
Food Preserving at Home

Food Preserving at Home gives practical, easy-to-understand advice on canning (bottling), pickling, making jam and marmalade, fruit jellies, chutney and preserves, freezing raw and cooked foods, drying foods outdoors and in a dehydrator, and smoking fish and meat in homemade smokers.

The book specifies methods and equipment, gives dozens of sample recipes including low-salt pickles and low- or no-sugar jam, and clear, general instructions and handy tables for a huge range of foods.

$27 Code: FPAH

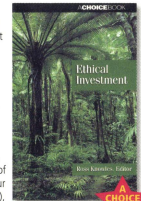
Before and After Retirement



This book helps you prepare for your retirement — whether it's 5, 10 or 20 years away. It explains the jargon involved in retirement issues, and what you need to know about pensions, nursing home fees, superannuation and tax. It will help you understand what's involved in planning for retirement, what questions you need to ask yourself and others, and where to find help. Remember 1999 is the Year of the Older Person, so take this opportunity to plan for your future.

$25 Code: BAAR

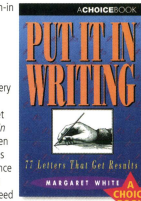
Ethical Investment



In the first Australian book on this topic, the expert contributors to *Ethical Investment* suggest issues to consider when looking at a company's ethics, give details of and rate 22 selected ethical investments, and give examples of how to invest in your own home (tax-free), and indirectly in the environment, by making your home energy-efficient.

$15 Code: ETHI

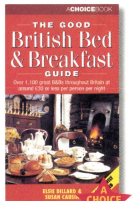
Put It In Writing



If you've ever had a run-in with a government department, bank, tradesperson, manufacturer, shop or other service provider, you'll know it can be very difficult to get your message across and get what you want. *Put It In Writing* can help. Written by a solicitor, it provides an authoritative reference to what your rights are and what letters you need to write, containing 77 sample letters that can be adapted to suit your situation.

$16 Code: PIIW

The Good British Bed and Breakfast Guide

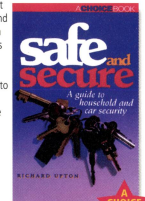


"If you seriously want to travel cheaply, your best bet is probably The Good Bed and Breakfast Guide." Financial Times (UK)

It contains full details of over 1100 of the best affordable B&Bs, listed by area, that charge a maximum of £30 per head. Features and restrictions are listed. Also includes colour maps.

$30 Code: BB&B

Safe and Secure

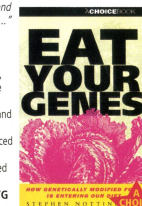


Home and personal security is an issue that concerns everybody, and not everything you can do needs to cost heaps of money.

Safe and Secure is full of practical advice to protect your family, possessions, car, house and yourself.

$17 Code: S&S

Eat Your Genes



"Stephen Nottingham takes a balanced and rational approach ..." Rosemary Stanton

This book looks at what genetically modified foods are, and how they have made it onto the market so quietly and quickly. It explains how they're produced and why they've remained unlabelled for so long.

$25 Code: EYG

• The following price rises will apply from1/7/99: ***Sustainable House* $35, *Warm House Cool House* $30.**

Order Form

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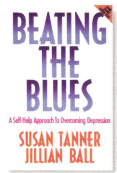
CB/9906

Beating the Blues

Practical self-help for those suffering depression — or just feeling a little low. Using questionnaires, tests and exercises the authors offer a way of changing the "faulty thinking habits" that can lead to depression. The book also includes a thoughtful chapter for those living with depression.

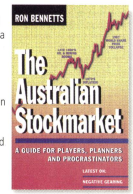


$23 Code: BTB

The Australian Stockmarket

This is *not* a beginner's guide to the stockmarket — it assumes you know a little and want an accessible guide to increasing your knowledge.

It contains information about market cycles, derivatives, taxation, investment strategies, and discusses how economic events affect the stockmarket.



$17 Code: ASTM

The Penguin Guide to Family Health

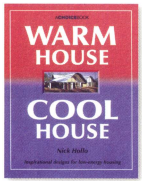
To be an effective, assertive consumer of health services, it helps to have some background knowledge. *The Penguin Guide to Family Health* contains simple explanations of a variety of medical complaints, tests and procedures.

Written by one of Australia's best known medical writers, it covers emergency and everyday first aid, over 1000 different disorders, medical tests and procedures, and a fascinating section on how the body works.

$35 Code: PGFH

Warm House Cool House

This is a comprehensive guide to low-energy house design for all climatic regions in Australia. It includes over 110 inspirational and beautiful Australian examples and includes colour photographs, house plans and practical advice.

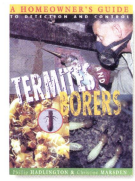


$27.50 Code: WHCH

Please note that price rises to $30 from 1/7/99.

Termites and Borers

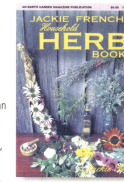
Every year termites and borers cause damage to homes and other buildings — damage that could have been minimised with early detection. This book is a full-colour guide to what to look for, what to do and how to prevent termite and borer damage. It also explains the chemical and non-chemical methods of eradication.



$15 Code: TAB

Jackie French's Household Herb Book

Having a herb garden is a joy for both gardeners and cooks. In this book Jackie French looks at the common and not so common herbs you can grow in an Australian garden. It includes useful planting advice, descriptions, recipes and amusing folklore.

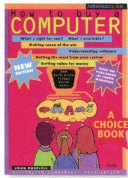


$10 Code: JFHH

CHOICE BOOKS

How to Buy A Computer, 3rd edition

This completely revised edition contains all the information you need to know when buying a computer.



It offers advice on whether you need a computer, what you can do with one, and what to do when you go shopping for one. *How to Buy a Computer* also has a checklist to take with you when you go shopping and a useful glossary of computer terms.

$10 Code: HBC3

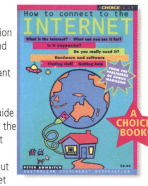
How to Get More From Your Computer

This book can help you make better use of your computer. In an easy-to-read style, it provides useful hints on how to set up your computer and associated hardware so that it's comfortable and easy to use; an overview of available software; instructions to help you upgrade your computer, and advice on how to keep your hard disk in order; make sure you have room to run new software and to save your work.

$10 Code: HGMC

How to Connect to the Internet

This guide is a handy introduction to getting around the Internet. Whether you want to use it for business or pleasure, this guide will point you in the right direction. It includes information about what the Internet is, how to connect to it, what you can use it for and how to get around it.



$10 Code: NET

OR BUY ALL THREE FOR $24

Code: COMP

Want the experience of freshly baked bread without the hard work? With a little experimenting first, you can have it with a breadmaker.

Breadmakers

IN BRIEF

- Most of the breadmakers we tested are capable of cooking a good loaf, but you may need to experiment with recipes to get bread you're happy with.
- Some of the breadmakers can do a lot more than make bread — jam, pizza dough and fresh pasta, for instance. See the table on pages 40–41 for model details.
- If you eat a lot of bread, a breadmaker will have paid for itself within a year or so — see *Are they value for money?*, page 39.

ONE ARE THE DAYS WHEN LOVERS of fresh bread were found standing with flour up to their elbows watching the sun rise. Or taking the soft option: racing up to the bakery before breakfast for an oven-fresh loaf. With a breadmaker you can throw everything in the night before, set the timer and wake up to the smell of baking bread.

What *can't* breadmakers do?

The main purpose of breadmakers is to make it quicker and easier to bake bread — from mixing the ingredients and kneading the dough, through to baking the finished product. Depending on which model you get, you can make anything from basic white through wholemeal, rye, corn, gluten-free and yeast-free to raisin bread. You can also use it to make dough, and then shape and bake it yourself — great for bread rolls, focaccia or pizza.

But it doesn't stop there. Many have programs for foods as diverse as fresh pasta dough, jam, soup and butter. We didn't test the machines on any of these programs, but the options certainly increase their potential value.

Do they make good bread?

We tested 11 breadmakers using both a commercial bread mix and recipes provided by the manufacturers, and found all but one model capable of making a good loaf of bread. So their scores are equal for breadmaking, but keep in mind that the results you get will vary according to the brand of bread mix or the recipe, and the quality of the ingredients you use.

While some of the recipes appeared to work better than others, manufacturers point out that they're only a guide. Apart from the ingredients, the results also depend on temperature, humidity and altitude, so you'll have to do a little experimenting to get a loaf you're happy with.

The only breadmaker with real problems was the BLACK & DECKER BMH200: the loaves were generally small and heavy. It has very few baking modes, there's no timer-delay option and no signal to tell you when to add extra ingredients like nuts and raisins. And because it doesn't have a lift-out baking pan, it's difficult to get the bread out of the machine.

WHAT TO BUY

	SANYO Bread Factory Plus SBM-201 GOOD VALUE	$149
	SUNBEAM Convection Bakehouse BM005	$279
	KAMBROOK Fresh Bread Machine KBM150 GOOD VALUE	$159
	BREVILLE Baker's Oven Plus BB250 GOOD VALUE	$169
equal	PALSONIC Auto Bakery PAB-3600	$199
equal	PANASONIC Bread Bakery SD-206	$249
equal	PANASONIC Bread Bakery SD-250	$279
equal	TIFFANY Automatic Bread Maker BM-642 GOOD VALUE	$129

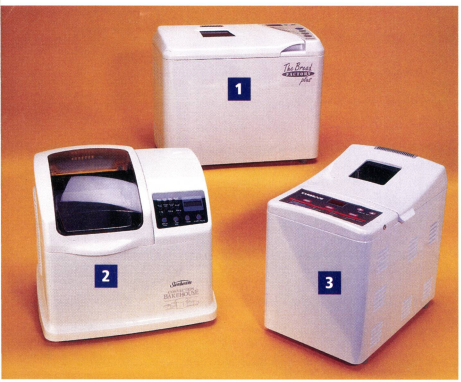
All these models were rated 'good' for both breadmaking and ease of use; what the top three did better was distributing the fruit more evenly in the raisin bread. The table on pages 40–41 has more information about the features and performance of each.

Want more recipes?

A good place to start looking is the Internet. We found lots of websites with recipes and suggestions for breadmaking — particularly www.kitchenlink.com/abm.html. Here you'll find a mammoth collection of links to over 1500 recipes at other sites. Just click on the first letter of the bread you're after (like 'G' for gluten-free') and follow the links from there. Most of the sites are American, so you'll have to take the recipes' different standard measures into account.

- Some breadmakers have a lot of baking and other cooking programs, while some provide comparatively few — see the table and notes 1 and 2 on page 40 for examples. A large range of programs may make it easy to cook a variety of foods, but the lack of specific programs doesn't necessarily mean you can't cook them. If there are particular kinds of bread (or other foods like jam or pasta dough) you want to make, look through the recipe book — if it's there, the machine should be able to make it.
- Look for a removable bread pan with a sealed base. This means you can take the pan out of the breadmaker to put the ingredients in, so they won't spill into the baking compartment, where they can be difficult to clean out. The **BLACK & DECKER** doesn't have a removable pan, instead supplying wire tongs to lift the bread out. Our testers, however, thought the tongs were rather awkward to use.
- In the shop, try taking the pan out of the machine and putting it back. It has to be held firmly in place so it doesn't move around during the kneading process. Most have metal clips, which can be rather stiff, making the pan difficult to insert and remove (especially when full of raw ingredients or hot bread). An easier alternative is a twist-lock mechanism, where you simply drop the pan into the baking compartment and twist it to lock it in place. The two **PANASONICs**, **SANYO** and **SUNBEAM Convection Bakehouse** had the most easily inserted and removed pans.

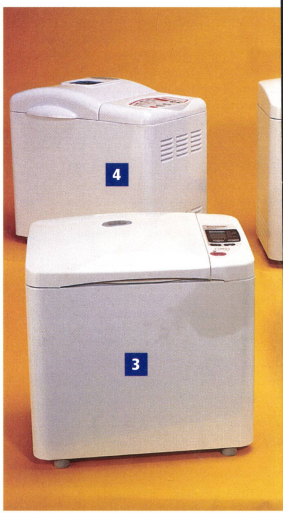
The Sanyo Bread Factory Plus (1), Sunbeam Convection Bakehouse (2) and Kambrook Fresh Bread Machine (3) had the edge over the other models because they distributed the fruit more evenly in raisin bread. This indicates a better kneading action.



- A detachable lid makes it easier to clean inside the machine.
- Check whether the recipes use metric or imperial measures (and if they're imperial, whether that's US or UK imperial). All the breadmakers we tested have recipes using metric measures. If you choose one that doesn't, make sure it comes with measuring cups and spoons (unless you have some old ones lying around). Just to make things more confusing, it seems that every metric country except Australia uses a 15 mL tablespoon — ours is 20 mL (see *How big is a tablespoon?*, right). Check which size the recipe is using before you start cooking.
- All the breadmakers we tested are about half the size of a small to medium microwave and, at an average of 6.5 kg, are quite heavy. So unless you have enough space to leave it on the bench, you could find it ends up living at the back of a cupboard.

Other features worth looking out for are:

- An additions signal (see note 5, page 40).
- Timer delay (see note 10, page 41).
- Keep-warm function (see note 11, page 41).
- Power-failure protection (see note 12, page 41).



Are they value for money?

We calculated the cost of making a loaf of bread in a breadmaker to be around 90 cents (including electricity). This assumes you're making lots of bread and buying ingredients in bulk: 5 kg bags of breadmaking flour or bread premix, and large packs of yeast.

A comparable loaf in a supermarket costs around $2. So if you make about five loaves a week, you'll find that the cheapest machine in our *What to buy* list will have paid for itself after six months, and the most expensive after a year.

But you probably wouldn't buy a breadmaker just because you wanted to save money: their main appeal is making freshly baked bread with minimum effort, and being able to experiment with different textures and flavours of bread.

The Remington Bread Machine (top) and Sunbeam Country Bakehouse (bottom) still make good bread, but aren't as easy to use as the models in the two photos below and below left.

These five models — the Breville Bakers Oven Plus (1), Tiffany Automatic Bread Maker BM-642 (2), Panasonic Bread Bakery SD-250 (3), Palsonic Auto Bakery (4) and Panasonic Bread Bakery SD-206 (5) — can also make a good loaf and are easy to use, but made a poor job of distributing raisins evenly throughout a loaf.

The Black & Decker was the only real disappointment: it produced small, heavy loaves and was harder to use than the top eight models. In particular, its fixed pan made it difficult to remove the bread without damaging it.

How big is a tablespoon?

Most manufacturers emphasise the importance of measuring ingredients accurately, because small variations can have major consequences. Three of the models — KAMBROOK, PALSONIC and TIFFANY — come with measuring cups and spoons. However, the tablespoon holds 15 mL rather than the Australian standard 20 mL.

If you lose the spoon, or just use any old tablespoon measure lying round the kitchen, you may get different results if you're following the recipes that come with the machine. But don't panic: you can use three teaspoons (a teaspoon is 5 mL) instead.

BREADMAKERS

	Brand / model (in rank order)	Manufacturer / distributor	Origin	Target price ($)*	Warranty (years)	Dimensions (w x d x h, mm)	Breadmaking programs [1]	Programs other than breadmaking [2]	Pan capacity (L)
GOOD VALUE	**SANYO** Bread Factory Plus SBM-201 **(A)**	Sanyo	China	149	1	400 x 245 x 330	Basic, rapid, wholewheat, rye, French, sweet	Dough, pasta, quick bread, pizza dough	3.1
	SUNBEAM Convection Bakehouse BM005	Sunbeam Victa	China	279	1	365 x 310 x330	Basic, rapid, wholewheat, French	Dough	3.1
GOOD VALUE	**KAMBROOK** Fresh Bread Machine KBM150 **(A)**	MEC-Kambrook	China	159	1	250 x 355 x 325	Basic, rye, buckwheat, cornmeal, French, fruit	Dough, jam, cake/quick bread	2.6
GOOD VALUE	**BREVILLE** Bakers Oven Plus BB250	Breville	China	169	1	240 x 300 x 320	Basic, wholewheat, rapid, French, sweet, yeast-free	Dough, jam, bake only	2.4
	PALSONIC Auto Bakery PAB-3600	NG Enterprises	China	199	1	335 x 255 x 330	Basic, wholewheat/multigrain, rapid, French, sweet	Dough, jam, cake/quick bread	2.6
equal	**PANASONIC** Bread Bakery SD-206	Panasonic	Japan	249	1	340 x 260 x 355	Basic, rapid, wholewheat, multi-grain, French, raisin, sandwich	Dough, pizza dough, raisin dough	3.0
	PANASONIC Bread Bakery SD-250	Panasonic	Japan	279	1	340 x 260 x 355	Basic, rapid, wholewheat, multi-grain, French, raisin, sandwich	Dough, pizza dough, raisin dough	3.4
GOOD VALUE	**TIFFANY** Automatic Bread Maker BM-642	GAF	China	129	1	340 x 245 x 310	Basic, wholewheat, French, sweet	Dough, cake/quick bread, jam	2.6
	REMINGTON Bread Machine BM100	Remington	China	139	1	340 x 250 x 315	Basic, wholewheat, French, sweet	Dough, jam, cake	2.6
equal	**SUNBEAM** Country Bakehouse BM4600	Sunbeam Victa	China	199	1	340 x 250 x 340	Basic, wholewheat, French, rapid, sweet	Dough, cake, bake only, pasta, butter, jam	2.9
	BLACK & DECKER BMH200 **(B)**	Mistral International	China	100	2	280 x 365 x 280	Basic, wholewheat, rapid	Dough	3.3

* Prices shown are a good target to aim for when shopping around, based on nationwide checks in March 1999.
na Not applicable — this model has a fixed pan.
(A) The manufacturer says this model has been discontinued, but you may still find it in some shops.
(B) The manufacturer says this model has been discontinued, and existing stock is being phased out.
(C) Not stated by the manufacturer, but seems to offer some power-failure protection.

1 Breadmaking programs

■ **Basic** — for breads with a large proportion of high-grade flour (flour with a high proportion of gluten, also called breadmaking flour), like standard white bread.

■ **Wholewheat (or wholemeal)** — for breads with a lot of wheatmeal or whole grains. There's a preheating period to soften grains, and extended kneading and rising times to encourage better gluten development.

■ **Multigrain, rye, buckwheat, cornmeal** — these all have slightly different cooking cycles.

■ **Rapid** — kneading and rising times are shorter than normal, so you'll get your bread faster, but it will be smaller, denser and have less flavour development.

■ **French** — for bread low in fat and sugar. Uses a higher baking temperature and produces a crisper crust.

■ **Raisin, sweet, fruit** — there's a signal when you have to add extras like raisins, other fruit, nuts, sun-dried tomatoes and so on (see note 5). It may also have a lower baking temperature to prevent burning.

■ **Sandwich** — produces a softer crust so it's easier to slice.

Just because a machine doesn't mention a particular kind of bread in its program modes, that doesn't mean you can't make it. Look through the recipe book to see if it offers an alternative baking mode for the kind of bread you want.

2 Other programs

■ **Dough** — for making bread dough to be shaped by hand (into rolls or plaits, for instance).

■ **Raisin dough** — like normal dough, but with a signal to add raisins, fruit, etc.

■ **Pizza dough** — a quicker dough-making program giving you softer, more pliable dough for pizza and focaccia.

■ **Pasta** — the dough is made simply by mixing the ingredients. There's no yeast in pasta, therefore no heat (for rising) involved.

■ **Quick bread, cake, yeast-free** — for breads and cakes that use leavening agents other than yeast, such as baking powder.

■ **Bake only** — this can be used to extend the bread's baking time (for a darker crust, or after a power interruption, say) or for making cakes (but you have to mix the ingredients yourself).

■ **Butter** — for churning butter.

■ **Jam** — making jams, conserves and chutneys.

3 Adjustable loaf size

Some bread machines provide the option of more than one loaf size.

4 Crust colour selection

Most machines give you a choice of how dark the crust will be. Some give you a choice of light, medium or dark. Others (marked 'L') are more limited: you only get a choice of medium or dark, and only on a certain size of loaf.

5 Additions signal

Breadmakers with an additions signal beep to tell you when you have to add soft ingredients like raisins. By adding them after the initial kneading process, they're less likely to get mushed. Some (marked 'P') will pause the machine while

5 Additions signal	6 Removable pan	7 Pan-holding mechanism	8 Easy to clean	9 Detachable lid	10 Timer delay	11 Keep-warm function (hours)	12 Power-failure protection	Viewing window	Comes with cup and spoon measures	13 Raisin distribution	14 Ease of use	15 Breadmaking	Brand / model (in rank order)	
✓	✓	Clip	✓✓	✓	✓	1	10 sec	✓		Very good	Good	Good	**SANYO** Bread Factory Plus SBM-201 **(A)**	
✓P	✓	Rubber clasps	✓✓	✓	✓	0.5		✓		Good	Good	Good	**SUNBEAM** Convection Bakehouse BM005	
✓	✓	Clip	✓		✓	1	**(C)**	✓	✓	Borderline	Good	Good	**KAMBROOK** Fresh Bread Machine KBM150 **(A)**	
✓	✓	Clip	✓		✓	1	5 min	✓		Poor	Good	Good	**BREVILLE** Bakers Oven Plus BB250	
✓	✓	Clip	✓		✓	1		✓	✓	Poor	Good	Good	**PALSONIC** Auto Bakery PAB-3600	
✓P	✓	Twist-lock	✗		✓	1	20 min			Poor	Good	Good	**PANASONIC** Bread Bakery SD-206	equal
✓P	✓	Twist-lock	✗		✓	1	20 min			Poor	Good	Good	**PANASONIC** Bread Bakery SD-250	
✓	✓	Clip	✓		✓	1		✓	✓	Poor	Good	Good	**TIFFANY** Automatic Bread Maker BM-642	
✓	✓	Clip	✗		✓	1		✓		Poor	OK	Good	**REMINGTON** Bread Machine BM100	equal
✓	✓	Clip	✗		✓	1		✓		Poor	OK	Good	**SUNBEAM** Country Bakehouse BM4600	
		na	✓✓	✓				✓		Poor	OK	Borderline	**BLACK & DECKER** BMH200 **(B)**	

you add the other ingredients; others keep kneading.

6 **Removable pan**
A removable pan makes it much easier to get the loaf out and clean up afterwards.

7 **Pan-holding mechanism**
Some machines have clips or other clasping devices holding the pan in place in the machine; others have a twist-lock mechanism — you simply place the pan in the machine and twist it to lock or unlock it. See *What to look for*, page 38, for more on this.

8 **Easy to clean**
✓✓ = Easy
✓ = Quite easy
✗ = Difficult
Flour and other dry ingredients can be thrown out of the pan and into the bottom of the machine during the initial mixing action. Another problem is that during the rising process, the dough may rise and stick to the lid, where it bakes on and then crumbles when you try to get it off. In most machines, flour and crumbs ended up in inaccessible places.

9 Having a **detachable lid** makes it easier to clean inside the machine. On some (the **BREVILLE**, **KAMBROOK**, **PALSONIC** and **TIFFANY** in this test) it's possible — though not necessarily easy — to dismantle the lid for cleaning.

10 **Timer delay**
This feature allows you to put the ingredients in the pan, then set the timer to delay the start of the breadmaking for up to 12 or 13 hours — ideal for waking up to fresh bread.

11 **Keep-warm function**
A post-bake warming function keeps the bread warm for about one hour (unless otherwise stated) after baking, and also prevents the crust going soggy.

12 **Power-failure protection**
Machines with this feature will restart the breadmaking from where it left off in the event of a power cut — providing it doesn't exceed the time stated in the table.

13 **Raisin distribution**
We rated the breadmakers on how evenly raisins were distributed throughout the bread. Some machines did a very good job of it, while others, which left the raisins in a big clump at the bottom, may disappoint you.

14 **Ease of use**
Ease of use was judged on the following features: instructions, loading and unloading the pan, programming, reading the display, adding ingredients and cleaning.

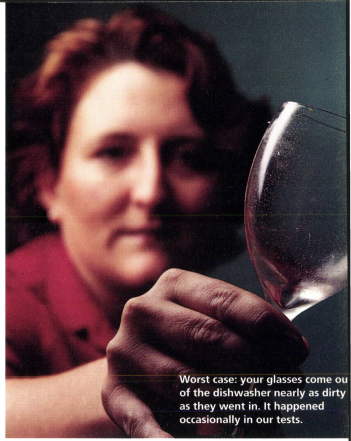
15 **Breadmaking**
We cooked several different loaves in each breadmaker, and all except the **BLACK & DECKER** were capable of making a good loaf. You may need to experiment with recipes and ingredients to get good results every time.

Ranking
The breadmakers were ranked first in order of their breadmaking performance. As 10 of them received an equal rating of 'good', this group was then ranked in order of ease of use. Eight of them had a rating of 'good', so to further differentiate them, they were ranked according to their raisin distribution score. However, the differences between them were fairly minimal, and — with the exception of the **BLACK & DECKER** — we think you'd be happy with any of them.

TEST REPORT

The good, the bad and the unclean

*If you assume all dishwashers clean well and you trust their energy ratings, you're in for a surprise. But the good news is you **can** have both clean plates and an energy-saving wash.*



Worst case: your glasses come out of the dishwasher nearly as dirty as they went in. It happened occasionally in our tests.

IN BRIEF

- Only one dishwasher, the AEG Öko-Favorit 6050, got good scores across the board. We tested it in 1997 and it's still on the market, but not for long — AEG plans to discontinue it. Others performed as well for washing and drying, but couldn't match its score for ease of use or, in some cases, energy efficiency.
- More models now have child safety features than when we last tested in 1997 (see *Safety*, page 45).

IF YOU WERE CHOOSING A DISHwasher, you'd probably start with mid-priced machines with good energy ratings. Then you'd check which met your specific needs — perhaps space for large plates or a child lock.

Without a laboratory on hand, you have to assume they all do a reasonably efficient job, but you might be disappointed. We tested 17 dishwashers priced between $800 and $1500 (when we bought them), and three scored less than 50% for washing — easily the poorest wash performer being the SIMPSON Silencio 52B850WF at just 28%. Also, the amount of energy the dishwashers used on a 'normal' program bore little relation to their energy label ratings (see *Energy labels — check the fine print*, page 46).

We found a dirty glass, coated with food, in the BOSCH SGS4002AU and items smelling of egg in a few machines (both SIMPSON Silencios, the KLEENMAID Crystal DW1N, BOSCH SGS4002AU and BOSCH Aquasensor SGS5302AU).

Both SIMPSONS gave off pungent burning smells during the drying cycle, probably caused by food residues caught between the door seal and base and then washed onto the heating elements. The manufacturer says high-foaming detergent caused this, but the same detergent didn't have this effect on the other machines.

An effective *and* efficient wash

The good news is that you don't have to choose between washing performance and water and energy efficiency. Apart from the BOSCH Aquasensor, all the models with good efficiency scores also got good washing scores. But two machines were particularly inefficient: the TECHNIKA Ardo LPA96 used almost 3 L more water per wash than its nearest rival, and the SIMPSON Silencio 52B850WF around a quarter more energy than any other machine.

The BOSCH Aquasensor SGS5302AU boasts an aquasensor that's supposed to measure how clean the water is after the prewash. If it's reasonably clean, it's reused for the main wash, saving water. But if the aquasensor finds the water is dirty, it's drained and clean water is used. Sounds like a great idea — if it works. Unfortunately, we can't say for sure that it does — see *Problems*, page 44.

WHAT TO BUY

equal	**AEG Öko-Favorit 6050**	$1595
equal	**AEG Öko-Favorit 4040**	$1449
equal	**ASKO 1605**	$1195
equal	**ASKO 1705**	$1395
equal	**CHEF Classic 8913** BEST BUY	$799
equal	**DISHLEX Global DX300**	$955
equal	**BLANCO BDW 203**	$995

All the dishwashers in the *What to buy* list got good washing and drying scores, but only the **AEG Öko-Favorit 6050** scored highly for ease of use.

The **CHEF Classic**'s low purchase price, combined with its comparatively low running cost (see page 47), make it the cheapest model overall of those we'd recommend.

WHAT TO LOOK FOR

Saving space — at a price

One of the models in this test, the **FISHER & PAYKEL DS601**, is a single-drawer version of the two-drawer dishwasher we reported on in July 1998. It's a seven-setting model and so doesn't directly compare with the others in the test (all 12- or 14-setting models), but we've included it as you could buy two drawers — the equivalent of a single 14-setting dishwasher.

This would give you maximum space flexibility plus the ability to run two different wash programs at the same time (pots in one, glasses in the other, for example) — but you'd be paying for the privilege. Two single-drawer models would cost more, both to buy and to run, than any of the conventional dishwashers.

But the model achieved good scores for washing, drying and ease of use, so it might be worth considering if your kitchen isn't spacious or your household is small. However, other space-saving dishwashers are also available, such as slimline and benchtop models.

- Look for a good energy rating and 'A' rating for water use. The more stars (up to six) or As (up to three) the better. However, these ratings may not be directly comparable from model to model — see *Energy labels — check the fine print*, on page 46.
- Check the machine will fit in your kitchen, allowing some room for ventilation. A slimline model might be a good buy if you're short of space, or the **FISHER & PAYKEL DS601** (see *Saving space — at a price*, left).
- If you have limited counter space, a freestanding dishwasher with a worktop may be useful. Some models are available in mobile versions — you can wheel them up to the kitchen sink when you need to use them if it's not practical to have them plumbed in.
- If you'd prefer to use only hot or cold water, check what's recommended for the machine (see note 2, page 46).
- Check the dishwasher has all the programs you'll want to use regularly.
- Check that the filter is easy to remove and clean.

Consider whether your normal dinnerware will fit in the dishwasher without crowding or hitting the spray arms. If you're not sure, take some items from home and try them in the shop. Look for models with adjustable basket heights and removable plate racks.

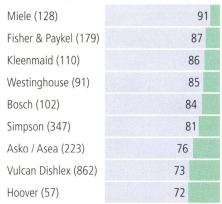
Which brands have subscribers found the most reliable?

We asked a group of subscribers whether their dishwasher had needed repairs in the previous 12 months and whether they would buy the same brand again.

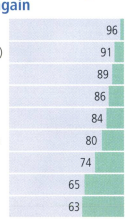
Around one in five dishwashers had needed repair, at a cost of $105 on average, making them a comparatively unreliable product. Controls, switches and pumps were the main problem areas. There was no difference between the number of repairs needed for machines with mechanical controls and those with electronic ones.

The graphs show the results for those brands for which we got more than 50 replies (the number in brackets indicates how many readers reported on each brand).

Percentage not needing repairs



Percentage who would buy the same brand again

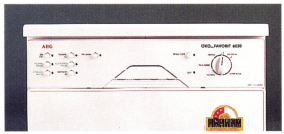


Dishwashers are listed in rank order from left to right. The prices shown are a good ta
aim for, based on nationwide checks in February/March 1999. Anything lower is a barg

Problems

In our initial set of tests, we encountered three problems:

- **The SIMPSON Silencio 52B850WF gave very poor washing results. We bought another unit, which scored better, but still didn't do very well; the table on page 47 gives the score for the latter.**
- **The BOSCH Aquasensor SGS5302AU is designed to save water by reusing prewash water if it's not dirty. In our tests, though, it reused prewash water during a run for which we used dirty plates, and didn't reuse it during another run for which we used clean plates. We bought a second model, which also performed erratically, so unfortunately we can't give a verdict on the aquasensor. The results in the table are from the second model.**
- **The ASKO 1705 used far more water than it should have. Following a service visit in which its water level was found to be too high, the dishwasher was retested and achieved a score closer to what was expected. The results in the table are for the model after repair.**



AEG ÖKO-FAVORIT 6050

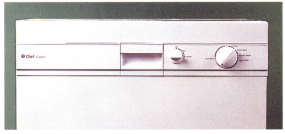
Target price: $1595

Good points

- Easiest to use.
- Good washing score.
- Very good drying score.
- Good energy efficiency.
- Very good water efficiency.
- Fits larger plates and champagne flutes at the same time.
- Height of the top basket can easily be adjusted (right side only).
- Can be programmed to wash half-loads.
- Has a water-softening system that may be useful in hard-water areas.
- Cutlery basket has an anti-nesting grid to improve cleaning.

Bad points

- No child safety features.
- The most expensive in the test to buy.



CHEF CLASSIC 8913

BEST BUY

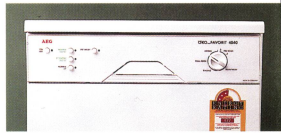
Target price: $799

Good points

- Its 10-year running costs, combined with its relatively low purchase price, make it the cheapest model overall of those we'd recommend from this test.
- Very good washing score.
- Good drying score.
- Good water and energy efficiency.
- The height of the top basket can be adjusted.
- Champagne flutes fit in upper basket.
- Cutlery basket has a small, removable anti-nesting grid to improve cleaning.
- Child-resistant latch on detergent compartment.

Bad points

- Plate racks can't be removed from the lower basket to fit large pots easily.
- Large plates and bowls can't be placed side by side without touching.



AEG ÖKO-FAVORIT 4040

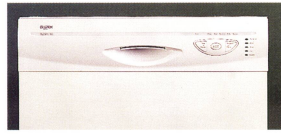
Target price: $1449

Good points

- Best washing score.
- Very good drying score.
- Good water efficiency.
- Has a water-softening system that may be of use in hard-water areas.
- Cutlery basket has a small, removable anti-nesting grid to improve cleaning.

Bad points

- No child safety features.
- Champagne flutes don't fit.
- The height of the top basket can't be adjusted.
- Plate racks can't be removed from the lower basket to fit large pots easily.
- Relatively expensive to run.



DISHLEX GLOBAL DX300

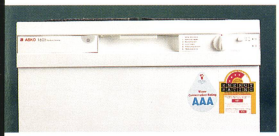
Target price: $955

Good points

- Good washing and drying scores.
- Good energy and water efficiency.
- Child lockout mode for controls, child-safe door lock and child-resistant latch on detergent compartment.
- The height of the top basket can be adjusted.
- Champagne flutes fit in top basket.
- Cutlery basket has a small, removable anti-nesting grid to improve cleaning.
- Delayed-start button, so you can program it to run while you're asleep, for example.

Bad points

- Large plates and bowls can't be placed side by side without touching.
- No anti-flood device.



ASKO 1605

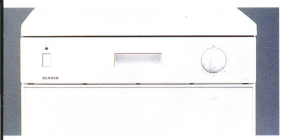
Target price: $1195

Good points

- Good washing score.
- Very good drying score.
- Good water and energy efficiency.
- Cutlery basket has an anti-nesting grid to improve cleaning.
- Has a plate-warming cycle — you can just pop clean, cold plates in briefly to warm.
- Has a child-safe door lock.
- Filter is easy to remove and replace.

Bad points

- The height of the top basket can't be adjusted.
- Champagne flutes won't fit.
- Plate racks can't be removed from the lower basket to fit large pots easily.
- Large plates and bowls can't be placed side by side without touching.



BLANCO BDW 203

Target price: $995

Good points

- Good washing score.
- Very good drying score.
- The height of the top basket can be adjusted.

Bad points

- No child safety features.
- Plate racks can't be removed from either basket to fit large pots easily.
- It's difficult to remove and replace the filter.
- No anti-flood device.

ASKO 1705

Target price: $1395

Good points

- Good washing score.
- Very good drying score.
- Good water efficiency.
- Cutlery basket has a small, removable anti-nesting grid to improve cleaning.
- Has a plate-warming cycle — you can just pop clean, cold plates in briefly to warm.
- Has a child-safe door lock.
- Champagne flutes fit in upper basket.
- Filter is easy to remove and replace.

Bad points

- The height of the top basket can't be adjusted.
- Plate racks can't be removed from the lower basket to fit large pots easily.
- Large plates and bowls can't be placed side by side without touching.

For people with a disability

An occupational therapist from the Independent Living Centre assessed the dishwashers for ease of use by people with a disability. The main features to look for are:

- Simple controls with clear markings and that don't require a great deal of strength to operate.
- Doors that are light and whose latches are easy to open and close.
- Detergent dispensers that are easy to get at, open and close.
- Cutlery baskets with a sturdy handle, making them easy to pull out. Look for large cutlery dividers, as they make loading and unloading easier. Anti-nesting grids can be awkward for some users, so look for removable ones.
- Filters that are simple to clean and can be easily accessed by people with back problems or in a wheelchair.
- The following machines are recommended for people with a disability: **AEG Öko-Favorit 4040** and **6050, ASKO 1605, DISHLEX Global DX300, BOSCH SGS4002AU, CHEF Classic 8913** and the **FISHER & PAYKEL Soft Touch 918TD**.
- The best option for people with a back problem is the single-drawer **FISHER & PAYKEL DS601**. If it's placed above knee height, it can be loaded and unloaded without bending down.

Safety

Small children will put anything in their mouths — even dishwasher detergent, which is caustic and can seriously burn or poison them. When we tested dishwashers in 1997, few had child-safe detergent compartments.

We noticed a slight improvement in this test: three machines have child-safe locks or catches (the ASKO 1605 and 1705 and BOSCH Aquasensor SGS5302AU), one has a child-resistant latch on the detergent compartment (the CHEF Classic 8913) and the DISHLEX Global DX300 has both, plus a child lockout mode for the controls.

What about the rest?

- **The WESTINGHOUSE and both SIMPSON machines scored less than 50% for washing — not really acceptable for a dishwasher. And the SIMPSON Silencio 52B850WF used so much energy it went below the bottom end of our scoring range — hence its zero rating (see page 47).**
- **The TECHNIKA scored less than 50% for both water and energy efficiency.**
- **Apart from these three, the rest of the models are all reasonably good dishwashers that only fell slightly behind those in our *What to buy* list. You'd probably be happy with any of them, especially if you found them at a good price. See *Saving space — at a price* on page 43 for more on the single-drawer FISHER & PAYKEL DS601.**

	Brand / model (in rank order)	Manufacturer / distributor	Origin	Target price ($)*	Warranty (years)	Dimensions (H x W x D)**	Type	Place settings	Water connection	Noise (dB)	
	AEG Öko-Favorit 6050 **(A)**	Andi-Co	Germany	1595	3	850 x 600 x 635	FW	12	H or C	**(K)**	1
equal	**AEG** Öko-Favorit 4040 **(A)**	Andi-Co	Germany	1449	3	850 x 600 x 610	FW	12	C rec	45	1
	ASKO 1605 **(B)**	Asko	Sweden	1195	2 **(E)**	815 x 595 x 600	BI, F, FW	12	C rec	51	1
	ASKO 1705 **(B)**	Asko	Sweden	1395	2 **(E)**	825 x 595 x 595	BI, F, FW	12	H or C	49	1
equal	**CHEF** Classic 8913 BEST BUY	Email	Australia	799	1 **(F)**	825 x 590 x 615	F, I	14	H or C	52	2
	DISHLEX Global DX300	Email	Australia	955	2 **(G)**	830 x 600 x 645	BI, I	14	H or C	**(K)**	1
	BLANCO BDW 203	MEA	Italy	995	1 **(H)**	855 x 600 x 650	FW	12	H or C	**(K)**	2
	BOSCH SGS4002AU	Bosch	Germany	1035	2	850 x 600 x 615	FW, BI, M	12	C rec	51	1
equal	**FISHER & PAYKEL** DS601 **(C)**	Fisher & Paykel	NZ	899	1 **(J)**	410 x 595 x 615	BI, I	7	C rec	46	1
	FISHER & PAYKEL Soft Touch 918TD	Fisher & Paykel	NZ	899	1 **(J)**	835 x 595 x 560	F	12	H / C	51	2
	BENDIX DWN 38 LB	Bendix	Italy	1095	2 **(H)**	850 x 600 x 610	FW, BI, I, M	12	H or C	**(K)**	1
	KLEENMAID Crystal DW1N	Thompson-Brandt	Spain	1299	5	845 x 595 x 630	F, FW, I	12	C	47	2
	BOSCH Aquasensor SGS5302AU	Bosch	Germany	1449	2	850 x 600 x 600	FW, BI, M	12	C rec	46	1
	TECHNIKA Ardo LPA96	Fagor	Italy	950	2	855 x 595 x 605	FW, I	12	C	55	2
	WESTINGHOUSE Freestyle 920	Email	Australia	899	2	835 x 595 x 625	F, BI, M	14	H or C	**(K)**	1
	SIMPSON Silencio 52B980WF	Email	Australia	899	2	835 x 595 x 600	F, BI, M	14	H or C	51	1
	SIMPSON Silencio 52B850WF **(D)**	Email	Australia	699	1	830 x 590 x 610	F, BI, M	14	H or C	58	2

Energy labels — check the fine print

Energy labels allow you to compare the efficiency of different models, but they're only useful if they're accurate and can be compared directly. When we tested the dishwashers on a 'normal' program, the models with good energy ratings didn't necessarily use less energy. We think this is because the manufacturer can choose any program that meets cleaning requirements for efficiency testing — many are not tested on their 'normal' program. So, for example, a model given five stars when tested using a 'light' program might in fact be an energy-munching monster when used on its 'normal' cycle. Check the fine print on the label to see which program the dishwasher was tested on.

In addition, manufacturers can currently test and certify their own products — this may change soon. Independent testing would be in the best interests of consumers.

Similar models

The following models would score the same for performance as the models we tested (in italics), but they might be slightly different for ease of use, because of different layouts or controls.

- *BOSCH Aquasensor SGS5302AU:* **BOSCH Aquasensor SGS5305AU, BOSCH Aquasensor SGI6905AU.**
- *SIMPSON Silencio 52B850WF:* **WESTINGHOUSE SB905WE.**
- *SIMPSON Silencio 52B980WF:* **SIMPSON Silencio 52B950WF.**
- *DISHLEX Global DX300:* **DISHLEX Global DX450, DISHLEX Global DX500.**
- *CHEF Classic 8913:* **CHEF Select 8903, CHEF Select 8904.**

The following models are only cosmetically different from the models we tested (in italics).

- *BOSCH SGS4002AU:* **BOSCH SGI4005AU.**
- *CHEF Classic 8913:* **CHEF 8914.**
- *WESTINGHOUSE Freestyle 920:* **WESTINGHOUSE Freestyle 921.**

1 Type

FW: Freestanding, with a worktop.
F: Freestanding, without a worktop.
BI: Built-in.
M: Mobile.
I: Integrated (built-in, with decor panels).

2 Water connection

H or C: Most dishwashers give you the choice of connecting to hot or cold water. Choosing hot water gives you reduced wash times and energy savings if you have a gas or solar heater or an off-peak hot water system. But if you connect to hot water, using an economy wash (which is usually energy-saving because the dishwasher doesn't heat the water to such a high temperature) becomes pointless, as the water is already hot. The rinse water will also be hot. In addition, enzyme detergents, claimed to be better for the environment, work best at lower temperatures.
H/C: You can connect these machines to either hot or cold water or to both taps, to take advantage of the machine's full range of cycles. It will take water from the hot or cold tap as each program demands it.
C rec: The manufacturer recommends connection to the cold tap.

3 Noise

You'd be aware of all these dishwashers as background noise

4 Running costs

Running costs were calculated for a 10-year period, assuming one full load is washed per day on a 'normal' wash cycle. We used a cost of 12 cents per kWh for electricity and $1 per 1000 L of water (both average costs around the country),

	4	5	6	7	8	9	10		
NORMAL CYCLE									
Time (min)	**Water used** (L)	**Energy used** (kWh)	**Running cost** ($ / 10 years)	**Water efficiency score** (%)	**Energy efficiency score** (%)	**Ease of use score** (%)	**Drying score** (%)	**Washing score** (%)	**Overall score** (%)	**Brand / model** (in rank order)	
84	15.8	1.36	1109	85	79	85	93	82	85	**AEG** Öko-Favorit 6050 **(A)**	
86	22.5	1.64	1349	67	57	65	95	86	79	**AEG** Öko-Favorit 4040 **(A)**	equal
98	19.5	1.50	1184	75	68	65	92	82	79	**ASKO** 1605 **(B)**	
102	18.4	1.62	1235	78	59	70	86	82	78	**ASKO** 1705 **(B)**	
91	21.5	1.37	1228	70	78	65	77	83	77	**CHEF** Classic 8913	equal
89	19.6	1.37	1218	75	78	60	78	82	77	**DISHLEX** Global DX300	
87	23.5	1.60	1242	64	61	65	94	78	75	**BLANCO** BDW 203	
92	22.1	1.39	1235	68	77	65	75	72	72	**BOSCH** SGS4002AU	
89	10.6 **(C)**	0.85 **(C)**	1920 **(C)**	71 **(C)**	53 **(C)**	83	87	68	72	**FISHER & PAYKEL** DS601 **(C)**	equal
95	23.1	1.45	1267	66	72	75	80	70	72	**FISHER & PAYKEL** Soft Touch 918TD	
82	24.8	1.68	1282	61	55	70	75	80	71	**BENDIX** DWN 38 LB	
69	21.6	1.41	1243	69	75	70	49	73	68	**KLEENMAID** Crystal DW1N	
84	14.7	1.43	1225	88	74	65	65	52	65	**BOSCH** Aquasensor SGS5302AU	
75	30.4	1.88	1482	46	39	60	65	71	60	**TECHNIKA** Ardo LPA96	
91	19.9	1.70	1275	74	53	70	69	46	58	**WESTINGHOUSE** Freestyle 920	
85	20.7	1.54	1208	72	65	60	57	43	55	**SIMPSON** Silencio 52B980WF	
95	27.6	2.54	1670	54	0 **(L)**	60	65	28	37	**SIMPSON** Silencio 52B850WF **(D)**	

Prices shown are a good target to aim for when shopping around, based on nation-wide checks in February/March 1999.

* Dimensions (rounded up to the next 5 mm) are for the smallest 'box' that could be placed around the machine, allowing for inlet and drain hoses. It's best to leave extra space around the machine for easy installation and air circulation.

(A) The manufacturer plans to discontinue these models soon, but they should currently still be available in the shops.

(B) These machines were modified earlier this year to fit 14 settings. This may affect their ease of use.

(C) This is a seven-setting model (see *Saving space — at a price*, page 43), so running costs have been doubled to aid comparison, and we doubled the consumption figures when calculating its energy and water scores.

(D) Models with serial numbers 91140193 and above have been adjusted. The manufacturer claims adjusted models will clean better but use more water and electricity. Adjusted and unadjusted machines will both be available in the shops. We tested an adjusted model.

(E) 10 years parts and labour on all stainless steel, 20 years parts and labour on the Pex safety hoses.

(F) 10 years on stainless steel interior.

(G) The stainless steel interior has 10 years on parts and two years on labour.

(H) Five years on motor parts, 10 years on stainless steel lining or components.

(J) Additional year if you return the Smart Care warranty registration card.

(K) The noise measurement is not available for dishwashers tested in 1997.

(L) See *What about the rest*, page 44.

and included the recommended dosage of detergent at $5 per kg.

5 Water efficiency score

This is based on the amount of water the machine uses on a 'normal' cycle. The **BOSCH Aquasensor SGS5302AU** didn't change the prewash water on this cycle, which it might have done had everything been working properly. Had it changed the water, its water usage would have increased by around 5 L and its water efficiency score would have dropped to approximately 74%. For more information about the aquasensor, see *Problems*, page 44).

6 Energy efficiency score

This is based on the amount of energy consumed by each dishwasher on a 'normal' cycle.

7 Ease of use score

This score reflects the ease and versatility of loading and unloading, with a focus on awkward items, as well as how easy it is to remove and clean the filter.

8 Drying score

This score reflects how dry the items were 30 minutes after the 'normal' cycle finished. During the 30 minutes the doors were left closed or, if recommended by the manufacturer, slightly ajar.

9 Washing score

We assessed how well the machines could remove food such as dried-on spinach, egg yolk and baby cereal.

Our scoring is based on an Australian standard, which counts dirt particles left on the dishes, but doesn't consider greasiness. We don't think you'd want to find greasy items in your dishwasher after a wash, so we take it into account too. In this test, we found that machines that produced greasy items also scored badly for leaving dirt particles.

10 Overall score

The overall score is a combination of the washing, drying, energy and water consumption scores for the 'normal' wash cycle, along with the ease of use score. Weighting is as follows:

- Washing performance: 40%.
- Drying performance: 20%.
- Water consumption: 15%.
- Energy consumption: 15%.
- Ease of use: 10%.

Note: Some of these dishwashers also appeared in our 1997 report (see CHOICE, July 1997, page 35) — they're still available. They don't have the same scores across the board as they did in the last report, as we've had to adjust our rating scale because some of the newer machines have improved significantly in water efficiency. The prices of some of these models have increased too.

RECALLS & BANS

If you find a recall or ban not on our list, please let us know. Companies often rent 1800 numbers for a couple of months after the recall is announced. If the number given is no longer operating, phone the manufacturer or retailer direct.

THE PRODUCT: Various suppliers have recalled secondhand **Toyota Surf 130 Series** vehicles, imported under the low-volume scheme. Four-door models with the following compliance plate approval (CPA) numbers are affected:

11331, 11422, 11584, 11669, 11798, 11833, 11837, 11849, 11904, 11915, 11919, 12094, 12125, 12173, 12175, 12450, 12587, 12588, 12662, 12812, 12813, 12900, 12941.

The CPA number is in the top left-hand corner of the vehicle's compliance plate.

The problem: When the vehicle is parked on a slope, the rear seatbelt retractors may lock; it may not be possible to pull out the seatbelts. They will still lock in an accident, so there is no danger if they are being worn correctly.

What to do: Contact your supplier to arrange reinstallation if necessary.

THE PRODUCT: Arthur Yates has recalled the **Clapper**, an on/off switch activated by clapping, for use with low power output appliances such as TVs and radios.

The problem: Due to a manufacturing fault, the clapper's fuse may blow when in ordinary use.

What to do: Return the clapper to the retailer for a refund.

THE PRODUCT: Sanofi Winthrop has recalled **Panamax Elixir**, 100 mL, AUSTR 13750, batch SD001 (expiry date 04/2000). The batch number and expiry date are printed on the bottom of the label's front panel.

The problem: The child-resistant cap is faulty on some bottles — it opens like an ordinary screwtop bottle. The contents are unaffected.

What to do: Return bottles with faulty caps to the place of purchase for a refund.

THE PRODUCT: Porsche has recalled all 1996 model **911 Carreras** and **911 Turbos**.

The problem: A fault in the electrical system may cause voltage peaks, which could trigger the driver's airbag during normal driving conditions.

What to do: Porsche is notifying owners. If you haven't been contacted, call an authorised Porsche dealer for inspection and correction if necessary, or call Porsche on 1800 062 911.

THE PRODUCT: Jalong Goat Dairy has recalled **frozen goat's milk, soft cheese** and **fetta cheeses** with the following best-before dates: up to and including September 12, 1999 (frozen goat's milk), April 1999 (soft cheese) and June 1999 (fetta). These products were only sold in Western Australia.

The problem: Unacceptable levels of micro-organisms have been found in the products during routine testing.

What to do: Don't eat the products. Return them to the place of purchase for a refund or call Jalong Goat Dairy on (08) 9574 7169 for more information.

THE PRODUCT: Subaru has recalled the following 1998 models: **Liberty Sedan** with vehicle identification numbers (VIN) WG029001-WG035883 and **Liberty Wagon** and **Liberty Outback** with VIN WG038000-WG050254. (The VIN can be found on the compliance plate, under the bonnet.)

The problem: The device that activates the seatbelt pre-tensioner (aimed at improving seatbelt performance in an accident) may ignite foam left at the pre-tensioner's base during assembly. In some cars the device wasn't switched on and won't operate. Either way, the seatbelts themselves will still operate.

What to do: Contact an authorised Subaru dealer for inspection and rectification if necessary, or call Subaru on (02) 9828 9111.

THE PRODUCT: Brother International has recalled model **VX-1410 domestic sewing machines**, sold in Australia between the middle of 1997 and early 1999.

The problem: Due to a wiring error, the sewing machine could become 'live', posing a risk of electric shock.

What to do: Don't use it; disconnect it from the power supply. Contact Brother International for further information, safety inspection and rectification if necessary on: (02) 9887 4344 (NSW); (03) 9899 4844 (Vic); (07) 3252 5257 (NT/Qld); (08) 8272 1300 (SA/Tas); or (08) 9478 1955 (WA).

THE PRODUCT: Sorell Fish and Deli has recalled **smoked mussels**, 150 g, with a best-before date of April 18, 1999. The mussels were only sold in Victoria and Tasmania.

The problem: Listeria bacteria were discovered in a pack during random testing.

What to do: Don't eat the mussels. Return them to the place of purchase for a refund or call Sorell Fish and Deli on (03) 6265 2288.

THE PRODUCT: Ford has recalled **Falcon XH Commercial models** (vans and utes). The affected models have factory-fitted cruise control, and were built between February 10, 1998 and February 10, 1999, or were fitted with cruise control as an accessory between June 4, 1997, and February 26, 1999.

The problem: The vehicles may have been fitted with a cruise control cable that's too short. A clip on its end could come loose, interfering with the throttle cable and preventing the engine from returning to idle.

What to do: Drive the vehicle with caution and at moderate speed. Ford is notifying owners. If you haven't been contacted, call any authorised Ford dealer for inspection and, if necessary, rectification, or Ford on 1800 333 306.

THE PRODUCT: Coles Supermarkets, Bi-Lo, Newmart and **Pick 'n Pay Hypermarket** recalled all 400 g bags of **Savings Value Bag Choc Sultanas, Bi-Lo Choc Sultanas** and **Value Bag Chocolate Coated Sultanas** on March 19, 1999.

The problem: Chocolate-covered peanuts were found inside some bags, posing a risk to people allergic to peanuts.

What to do: Return bags to your retailer for a full refund. For further information contact Coles Myer on 1800 061 562.

THE PRODUCT: Bluebird Foods has recalled 135 g packs of **Strawberry** and **Choc Hazelnut Dunkaroos** (biscuits) with use-by dates from November 1, 1999 to November 20, 1999, inclusive.

The problem: Metal shavings were found in some biscuits during an inspection.

What to do: Don't eat them. Return them to the place of purchase for a refund or call Bluebird Foods on 1800 025 768 for more information.

THE PRODUCT: Kmart has recalled all **boxed chocolates** and all **Easter chocolate products** bought between January 18, 1999 and March 18, 1999, from its **Burwood, Victoria, store** (corner of Burwood Highway and Blackburn Road, Burwood, Victoria).

The problem: Some chocolates have developed an unusual smell and appearance during storage. Kmart doesn't know what caused this or whether it poses a health risk.

What to do: Don't eat the chocolates. Return them to any Kmart for a refund or replacement or call Kmart on 1800 634 251 for further information.

Recalls continued on page 51

COMPENSATION

THE PRODUCT: Nissan has offered to compensate customers who bought a **1998 Nissan diesel Patrol** before November 16, 1998.

The problem: Advertising about the vehicle's fuel capacity was misleading.

What to do: Contact Nissan on 1800 035 035 to claim two free services (at 50,000 and 60,000 km) and a year of extended roadside assistance.

REFUND OFFERS

THE PRODUCT: Kmart has issued a refund offer for the **Black & Decker 2 Cup Espresso Machine**, sold in its stores between October 28, 1997 and April 14, 1998.

The problem: The in-store advertising of the product did not reflect the continued discounting of the product throughout the period. Kmart will refund the purchase price to any consumer who claims to have been misled by the price representations.

What to do: Return the product with proof of purchase to any Kmart store, or phone customer inquiries on 1800 627 623.

THE PRODUCT: Blackmores is relabelling **Cod Liver Oil Liquid**, 200 mL.

The problem: The product is labelled "Made in Australia", but the cod liver comes from the North Sea.

What to do: If you want a refund, return the product to the place of purchase or call Blackmores on 1800 808 522.

Order Form

CHOICE Products

Australian Consumers' Association 57 Carrington Road, Marrickville NSW 2204 **Phone** Subscriptions: (02) 9577 3399 General: (02) 9577 3333 **Fax** (02) 9577 3355

Subscriptions

Subscriptions	Cost $		Qty Self	Qty Gift	Amount
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2 years	100		....	....	.....
1 year	72	Company/institution	....	....	.....
2 years	136		....	....	.....
Overseas add $12 for 1 year and $22 for 2 years					
Consuming Interest *(4 issues a year)*					
1 year	27	Personal subscription	....	....	.....
2 years	50		....	....	.....
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Overseas add $6 for 1 year and $10 for 2 years					
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2 years	94		....	....	.....
1 year	72	Professional/institution	....	....	.....
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Overseas add $12 for 1 year and $22 for 2 years					
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2 years	60		....	....	.....
1 year	36	*Computer* CHOICE *alone*	....	....	.....
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CHOICEFax					
Single article	6	Subscriber	....	....	.....
	16	Non-subscriber	....	....	.....

Article title: .....

Issue date: ..... Fax no: .....

Filing systems		Colour			
Box holder *(holds 24)*	12	Red	....	....	.....
		Blue	....	....	.....
Binder *(holds 12)*	12	Red	....	....	.....
		Black	....	....	.....
Health Reader binder *(holds 2 years)*	12	White	....	....	.....

Order Total .....

Payment method

I wish to pay by ❑ Cheque ❑ Money Order
(payable to Australian Consumers' Association)

or, I wish to pay by ❑ Bankcard ❑ Mastercard ❑ Visa ❑ Amex ❑ Diners Club

Card number

Name on card ..... Expiry date ...../.....

Signature .....

Mr/Mrs/Miss/Ms ..... Subs. no. .....

Address .....

..... Postcode .....

Include me in Subscriber Draw ❑ Yes ❑ No Telephone .....

Gift recipient details:

Mr/Mrs/Miss/Ms .....

Address .....

..... Postcode .....

Gift card to read: .....

To ..... From .....

Send gift renewal notice to me ❑ Yes ❑ No

To speed your order, attach your CHOICE mailing label or write in your subscriber number where noted above.

Back issues.

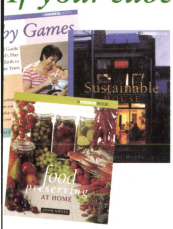
Subscribers can buy back issues for $6 each. Non-subscribers can purchase back issues for $16 per copy. Write to CHOICE Consumer Services, 57 Carrington Road, Marrickville 2204, or phone (02) 9577 3399.

Subscription problems or changes of address.

Write to CHOICE Consumer Services, 57 Carrington Road, Marrickville 2204, phone (02) 9577 3399, fax (02) 9577 3355 or email to ausconsumer@choice.com.au. Please include your subscriber number (found in the top corner of your CHOICE address label) or have it ready by you when you phone us.

INS/9906

If your subscription is due to expire — renew now!



42nd SUBSCRIBER DRAW

Every subscriber who renews their subscription to one of our magazines between June 1 and June 30, 1999, will automatically be entered to win $100 worth of CHOICE Books of your choice.

The winner of the 39th Subscriber Draw is Maggie Marks-Christenson of Terrigal, NSW.

Conditions apply to the draw: call (02) 9577 3399 for details.

NSW permit No. TC 99/3980
ACT permit No. TP 98/3643
NT permit No. NT 99/1247

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ABOUT THE AUSTRALIAN CONSUMERS' ASSOCIATION

The Australian Consumers' Association is a non-profit, non-party-political organisation, established in 1959 to provide consumers with information and advice on goods, services, health and personal finances, and to help maintain and enhance the quality of life for consumers. It is a Council member of Consumers International.

We are completely independent. We buy all the products we test at random in the marketplace; we never accept products to be tested as gifts or loans from manufacturers or retailers. We are not beholden to any commercial, government or union interests, and we don't accept advertising, paid or unpaid. Our income is derived from the sale of CHOICE and our other publications and products.

We test and rate products and services. Our ratings are usually based on quality without regard to price, and are derived from lab tests, expert judgments and reader surveys. If a product is high in quality and relatively low in price, we deem it a **Best Buy**. A rating applies only to the brand and model tested, not to other models sold under the same brand name, unless so noted. We can't conduct special tests or provide information about tested products beyond what appears in CHOICE. Financial information in CHOICE is of a general nature, and is not intended to be advice on individual investments which should or should not be made.

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We represent and act in consumers' interests. We lobby and campaign on behalf of consumers to promote their rights, to influence government policy, and to ensure consumer issues have a high profile in the public arena.

Membership. Subscribers can become voting members of the Consumers' Association on application. Membership costs $81 per year, which covers your subscription to CHOICE and a further subscription to our consumer policy and campaigning magazine, *Consuming Interest*.

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Test Research provides fee-for-service testing and research on consumer products, services and regulatory issues for other consumer organisations, government and industry.

Manager: Raja Rajagopal. **Contact:** Jeanette Dwyer on (02) 9577 3399.

RECALLS & BANS

Continued from page 48

THE PRODUCT: Rover Australia has recalled automatic **Range Rovers** built between June 1994 and August 1998, with vehicle identification numbers (VIN) MA300000 to XA410482. The VIN can be viewed through the windscreen on a vehicle identification plate on the passenger's side of the dash fascia.

The problem: Water may accumulate in the end of the automatic transmission breather pipe. In very cold weather the water could freeze, blocking the pipe. In extreme conditions, this could cause a leakage of transmission fluid.

What to do: Contact the Rover Australia Customer Response Centre on 1800 625 642 to arrange inspection and reworking, if necessary.

THE PRODUCT: Beaurepaires has recalled **Gro-Dinosaurs**, miniature plastic dinosaurs which grow up to six times bigger when exposed to water, and shrink again as they dry. The dinosaurs were given to customers as part of Beau's Stone Age Sale', earlier this year.

The problem: While they're small, the dinosaurs may present a choking or inhalation hazard.

What to do: Dispose of them or return them to a Beaurepaires store. Call Beaurepaires on (03) 9349 4157 between 8 am and 5 pm EST from Monday to Friday for more details.

THE PRODUCT: Fosseys and **Target** have recalled **boys' three-piece sets**, sizes 1–4, consisting of a blue top, tartan cap and tartan pants. The sets were sold through Fosseys stores between January 4, 1999, and April 21, 1999, and Target stores between December 21, 1998, and April 16, 1999.

The problem: If toggles on the end of the drawstring at the neck of the top are bitten, they could break and cause cuts, or be swallowed.

What to do: Remove the toggles yourself or return the set to your nearest Fosseys or Target store for toggle removal or a refund. For more information, call Fosseys on 1800 814 788.

THE PRODUCT: Target has recalled **babies' pink and grey Flowerpot Jacket**, sizes 0000–1. The pink jacket has a grey flowerpot in the pocket position with a white flower growing out of it. The jackets were sold through Target stores between March 1999 and April 13, 1999.

The problem: The fabric covering could come off the buttons and be swallowed.

What to do: Return the jacket to your nearest Target store for a refund or call Target on 1800 814 788 for more information.

THE PRODUCT: Crazy Clark's Discount Variety Stores has recalled **Infants' Fleecy Sleeping Bags**, sizes 00–2, sold from March 14, 1999, until April 22, 1999, in Crazy Clark's stores in Queensland.

The problem: The sleeping bag, which is made of flammable fabric, doesn't have the required fire warning attached to it.

What to do: Don't use it. Return it to your nearest Crazy Clark's store for a refund or call (07) 3865 4200 for more information.

THE PRODUCT: Holden has recalled **Commodore VTs** built between August 24, 1998, and December 11, 1998. The affected vehicles have vehicle identification numbers (VIN) ending L367025 to L413138 inclusive. The VIN can be viewed on the vehicle identification plate through the passenger's side of the windscreen.

The problem: The microprocessor controlling the airbags and seatbelt pre-tensioners may malfunction, possibly triggering them during normal driving conditions. Before this happens, the 'supplemental restraint system' warning light will come on.

What to do: If your warning light is on, don't drive your car. Whether it's on or not, contact any Holden dealership immediately to arrange inspection and rectification, if necessary. Call Holden on 1800 632 826 for more information (7 am to 7 pm EST Monday to Friday and 9 am to 1 pm EST Saturday).

THE PRODUCT: Trio Brothers Trading has recalled transparent disposable **Litz lighters** in a range of colours.

The problem: The Litz brand name is not marked on the lighters' metal fire guards, as required.

What to do: Return the lighters to the place of purchase for a refund or call (07) 3343 7588 for more information.

WHAT DO *you* KNOW?

1 How much of the maximum amount of salt you're recommended to eat in a day is in four slices of wholemeal bread?

A) A tenth.
B) A quarter.
C) Half.
D) All.

2 If you buy something from a shop with a sign saying 'no refunds', you won't be able to take it back under any circumstances.

True or false?

3 Adult women should consume about 800 mg of calcium a day — but more if they're:

A) Pregnant.
B) Breastfeeding.
C) Menopausal.
D) Any of the above.

4 UHT (or long-life) milk is less nutritious than pasteurised milk.

True or false?

5 What do the letters 'NP' stand for on laundry detergents?

A) Non-polluting.
B) Non-poisonous.
C) No phosphorus.
D) No pigments.

6 One of the main causes of a leaking roof is porous tiles.

True or false?

7 Which of the following impurities will an activated carbon (charcoal) water filter generally remove from household water?

A) Chlorine.
B) Metals (such as lead and copper).
C) Giardia and cryptosporidium parasites.
D) Funny taste.
E) Fluoride.

Answers

1 **B.** Four typical slices of wholemeal, multigrain or white bread contain around a quarter of the recommended daily limit, 2300 mg of sodium. Rye bread, focaccia and pita contain even more.

2 **False.** No matter what the retailer says or what signs it puts up, you have an absolute right to take a product back if it: isn't of merchantable quality; isn't fit for a purpose you made known to the shop; doesn't match its description; or has hidden defects.

3 **D.**

4 **False.** Ultra-high-temperature sterilisation kills bacteria, but doesn't affect the nutritional value of the milk.

5 **C.** These laundry detergents have no or up to 0.5% phosphorus, which at high levels can contribute to excessive growth of blue-green algae in inland waterways. A 'P' symbol indicates they contain up to 5% phosphorus.

6 **False.** Tile porosity is often claimed to be the reason for a leaking roof, and unscrupulous roof restorers charge unsuspecting home owners hundreds of dollars to 'seal' the tiles and reinforce the roof's waterproofing. The truth is that all concrete and terracotta tiles are porous and hold water, but unless there's a manufacturing fault, or the tile has been damaged, water shouldn't seep through.

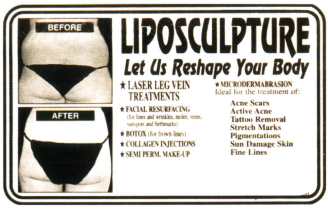
7 **A) and D).** See *How safe is your tap water?*, CHOICE, March 1999, for more on water filters.

the HARD word

Mystic mystery: update

Some helpful readers have solved the mystery as to why James Simpson Winslow and Madeleine the psychic (from May's *The Hard Word*) apparently share the same Gold Coast address. It seems that 15 Albert Avenue is the address of a business that rents out mailboxes and provides a range of office services.

It's certainly a good ploy. The 'Suite 406' fooled us, and no doubt would fool others, who might think, "Well, if they have an office suite, they must be legit," and happily send off their money. They might be more cautious if it was going to 'PO Box 1234'.



Or just get a bigger bikini!

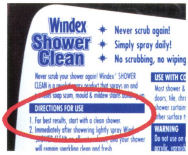
Not a grate add

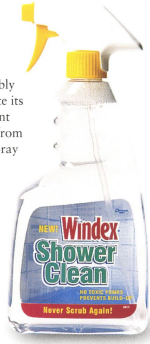
Sorry to be pedantic, but that's not how you spell 'grammar'.

Question is, did they use one of these dictionary/thesaurus things to check their advertising copy?

Taking us to the cleaners?

If you bought this product to clean your shower, you'd probably be disappointed. Because, despite its name, all it promises is to prevent soap scum, mould and mildew from building up — as long as you spray it on *every day*.


Windex Shower Clean
Never scrub again!
Simply spray daily!
No scrubbing, no wiping
USE WITH CO
DIRECTIONS FOR USE
1. For best results, start with a clean shower.
2. Immediately after showering lightly spray Windex
WARNING
Do not use on acrylic, enamel



Make sure you keep taking those contraceptives, boys ...

... because you wouldn't want to accidentally get pregnant while taking these — too much vitamin A may cause birth defects.

It's nice to see so much information on a label, though.

How about a little help?

The hard word would like to thank all the readers who have responded with examples of outrageous ads, promotions and products. Thanks to F Bolle, G Dooley, J Gutzinger, J Nash, D & T Saunders and J A Taylor for their contributions to this month's *The hard word*. Please keep sending them in.

If you have any examples that you think deserve to be on this page, send them to *The hard word*, CHOICE, 57 Carrington Road, Marrickville 2204, or email your suggestions to thehardword@choice.com.au.

Where's the cheese?

Or milk, or cream, or yoghurt ... or *anything* dairy?